

1956



NEW SOUTH WALES

THE ROYAL SOCIETY for the Promotion OF HEALTH LIBRARY

REPORT

OF THE

DIRECTOR-GENERAL

OF

PUBLIC HEALTH

NEW SOUTH WALES

1950

Wholly set up and printed in Australia by

A. H. Pettifer, Government Printer, Sydney, New South Wales

1956

* 81687--1

DEPARTMENT OF PUBLIC HEALTH, NEW SOUTH WALES.

OFFICE OF THE DIRECTOR-GENERAL OF PUBLIC HEALTH,

93 Macquarie Street and 52 Bridge Street, Sydney.

Members of the State Board of Health, 1950.

Dr. E. S. Morris (President); Dr. H. G. Wallace; Dr. Cecil Purser; Dr. C. J. M. Walters; R. J. Hawkes, Esq.; A. E. Dunn, Esq.; J. Smith, Esq.; Miss M. Grove; Mrs. C. M. Melville; Mrs. E. G. Clancey.

Administrative Staff.

Director-General of Public Health and Commissioner for Venereal Diseases.—E. Sydney Morris, M.D., Ch.M., D.P.H.

Deputy Director-General of Public Health and Senior Medical Officer of Health.— Hugh Gilmour Wallace, M.B., B.S., D.P.H.

Metropolitan Medical Officer of Health.—John Grahame Drew, M.B., B.Ch., M.R.C.S., L.R.C.P., D.P.H., D.T.M., D.T.H., F.R.San.I.

Assistant Medical Officers of Health.—Bruce Robson Overend, M.B., Ch.M., D.P.II., D.T.M., D.T.H.; Hugh Croft Johnston, M.B., B.S., D.P.H.

Sccretary.—GORDON LOUGHREY.

Divisions and Branches.

The following divisions are controlled by the Director-General of Public Health.—Maternal and Baby Welfare; Tuberculosis; Social Hygiene; Industrial Hygiene; Government Medical Officers for Sydney; Medical Officers of Health, Metropolitan, Newcastle, South Coast, Mitchell, Richmond-Tweed and Broken Hill Districts, Microbiological Laboratory, Chemical Laboratory; Health Education; Pure Food; Sanitation, &c.

The Hospital Division comprises The David Berry Hospital, three State Hospitals and Homes, Waterfall Sanatorium (Tuberculosis) and Auxiliary at Randwick, Strickland Convalescent Hospital, Vaucluse.

Legislative Enactments.

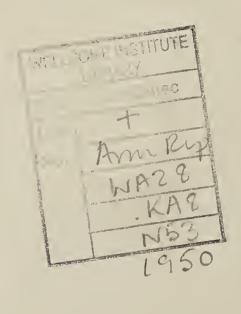
The Minister of Health is charged with the administration of the following Acts, for the promotion of the public health, execution of which is left to the Director-General of Public Health and the staff working under his control:—Food Preservation by Sulphur Dioxide Enabling Act, 1920; Noxious Trades Act, 1902; Private Hospitals Act, 1908; Public Health Acts, 1902-1944; Pure Food Act, 1908; King George V and Queen Mary Maternal and Infant Welfare Foundation Act, 1937. Burials in closed cemeteries and the exhumation of bodies for the purpose of re-interment, &c., are also dealt with.

CONTENTS

Letter of Presentation to the Hon. N Vital Statistics, 1950: Extract from								 R ('AD	···	Pag 5
on Vital Statistics for 1950				•••						7
		SEC	TION	I.						
				Disea						
Return of Diseases notifiable under $1950 \dots \dots \dots$	the Pu	blie H	ealth A	Acts for	the ye	ear end	ed 31st	Decen	nber,	11
Venereal Diseases Act 1918: Report					Iygien	e Divis	ion (Dr	. J. Co	OPER	
Booth) Consultative Council for the Physic	ally Ha	 andiea	 pped (\dots Acute A	 Anterio	 r Polio	 mveliti	 is) : Re	 eport	31
by Dr. M. Bertram		•••	•••	•••	•••	•••	•••	•••		33
В	-Pubic	Heal	th Ad	ministr	ation.					
Report of the Government Analyst				•	•••	• • •		•••	• • •	36
Pure Food Act 1908–44: Report of Report of Health Inspection Branch		-			WILL	IAMS)	•••	***	• • •	40
Private Hospitals Act, 1908: Repo				•	•••	•••	• • •	•••	• • •	42 43
Medico-Legal Section—										
Report of Government Medical			•	,		′		• • •	•••	44
Report of Government Medical Health Education and Propaganda						. ENGL	AND) 		•••	44
1 0			·						•	
Report of Nutrition Section	(CÌ	Vutriti	on.						40
meport of National Section	•••	•••	•••	•••	•••	• • •	•••	•••	• • •	46
D.—Divis Report of Director (Dr. Grace J. Cu			ernal a	and Ba	by W	elfare.				
Part I. Maternal Welfare	•••	•••	•••	•••	•••	• • •	•••	•••	•••	47
Part II. Infant Welfare Part III. Pre-school Health Ser	···	• • •	•••	•••	•••	•••	•••	• • •	• • •	52 5e
Tart III. Tre-senoor Hearth Ser	VICE	•••	•••	***	• • •	• • •	• • •	•••	•••	56
Report of Director of Division of To	abereule F.—l	osis (I				w)	•••	•••	•••	60
Report of Director (Dr. C. J. Cump	iins)	•••	• • •	•••	•••	•••	•••	•••	•••	64
Report of Director School Medical S				l Servi	ice. 	•••	•••	• • •	•••	70
	Н	–Den	tal Ser	vices.						
Report of Director Dental Services	(Dr. L	. Pud	NEY)	•••	•••	•••	•••	•••	•••	70
		SECT	rion i	T						
,				f Healt	h.					
Metropolitan Health District (Dr. J.					•••	•••	• • •	• • •	• • •	71
Hunter River Health District (Dr. J				•••	• • •	• • •	•••	***	•••	72
South Coast Health District (Dr. A. Mitchell Health District (Dr. E. WAI		FFROY)	•••	• • •	•••	•••	***	•••	74 77
Richmond-Tweed Health District (D				• • •	•••	•••		• • •	• • •	79
Broken Hill and District (Dr. J. T.	Jullen))	•••	• • •	• • •	•••	• • •	• • •	•••	82
		SECT	ION I	II.						
Ş				d Hom	es.					
Striekland Convalescent Home, Vauc							•••		• • •	83
Lideombe State Hospital and Home	• • •		•••	• • •	•••	• • •	• • •			83
Liverpool State Hospital and Home	•••	•••	• • •	•••	•••	• • •	• • •	•••	• • •	84
Newington State Hospital and Home Randwick Auxiliary Hospital	•••	• • •	• • •	•••	•••	• • •	• • •	• • •	• • •	84 85
Waterfall Sanatorium	•••	•••	• • •	•••	•••	•••	•••	•••	• • •	86
David Berry Hospital		•••	•••	* • •	•••	• • •	•••	•••	•••	86
Leper Lazaret	•••	•••	•••	•••	•••	•••	• • •	•••	* * 6	87
	\$	SECT	ION I	v.						
	Pathol	logica	l Lab	oratory	•					
Report of Director Pathological Lal	boratori	ies (D	r. E. I	. Morg	AN)	• • •	•••	•••	• • •	89

LIST OF GRAPHS

	Page.
Annual Death Rate per 1,000 of the Population in New South Wales, 1875–1950	. 12
Caneer, Tubereulosis and Heart Disease—Annual Death Rate per 100,000 of Population in New South Wales, 1875–1950	n . 14
Pueumonia—Annual Death Rate per 100,000 of Population in New South Wales, 1875–1950	. 16
Influenza—Annual Death Rate per 100,000 of Population in New South Wales, 1875–1950	. 17
Measles—Annual Death Rate per 100,000 of Population in New South Wales, 1875–1950	. 22
Whooping Cough—Annual Death Rate per 100,000 of the Population in New South Wales 1875–1950	s, . 25
Typhoid Fever—	
Annual Death Rate per 100,000 of Population in New South Wales, 1875–1950	. 28
Annual Case Rate per 10,000 of Population in New South Wales, 1898–1950	. 28
Searlet Fever—	
Annual Death Rate per 100,000 of Population in New South Wales, 1875–1950	. 29
Annual Case Rate per 10,000 of Population in New South Wales, 1898–1950	. 29
Diphtheria—	
Annual Death Rate per 100,000 of Population in New South Wales, 1875–1950	. 30
Annual Case Rate per 100,000 of Population in New South Wales, 1898–1950	. 30
Infantile Paralysis—Annual Death Rate and Case Rate per 100,000 of the Population in New South Wales, 1913–1950	v . 35
Deaths due to Puerperal Condition, New South Wales—Death Rates from Certain Causes pe 1,000 Live Births for the Years 1895–1950	r . 50
Maternal Mortality—Deaths from Criminal Abortions as percentage of total Maternal Death in New South Wales, 1905–1950	s . 51
Infantile Mortality, New South Wales-In Age Periods under 1 year, from 1895 to 1950	54
Diarrhoea and Enteritis—Annual Death Rate per 100,000 of the Population in New Sout Wales, 1875–1950	h 55
Tuberculosis—Annual Death Rate per 100,000 of the Population in New South Wales, 1875–195	0 61



Report of the Director-General of Public Health to the Honourable Minister for Health (The Hon. M. O'Sullivan, M.L.A.)

Sir,

I have the honour to present my report on the work of this office for the year ended 31st December, 1950.

Vital Statistics.

Vital statistics of New South Wales for the year 1950 have been prepared by the Government Statistician, Mr. S. R. Carver, who points out that the Sixth Revision of the "International Lists of Diseases and Causes of Death" was used for the first time in classifying causes of death for 1950. This has given the advantage of international comparison, but the change has the disadvantage of breaking comparison with past years. However, to smooth transition from the old to the new basis and to provide a link between the past and future, the deaths for 1950 have been classified according to the old and the new bases.

The population at the end of 1950 was 3,278,026. During the year, the increase in population by excess of births over deaths was 40,627 and by migration 61,464. The total number of live births was 71,592 (rate 22.20 per 1,000 mean population). Deaths numbered 30,965 equivalent to a rate of 9.60 per 1,000 of population. The infantile mortality rate was 27.04 per 1,000 live births.

Infectious Diseases.

Typhoid Fever.—16 cases (4 deaths) were notified, compared with 8 cases (no deaths) in 1949.

Scarlet Fever.—1,052 cases (1 death) were notified compared with 1,514 cases (3 deaths) in 1949.

Diphtheria.—390 cases (24 deaths) in 1950 compared with 627 cases (36 deaths) in 1949.

Infantile Paralysis.—789 cases (55 deaths were notified in 1950—an epidemic rise in incidence compared with 182 cases (8 deaths) in 1949 and 87 cases (no deaths) in 1948.

Tuberculosis Division.

The total of notifications for all forms of tuberculosis during the year was 1,787, an increase of 146 over those of the previous year. Deaths from all forms of tuberculosis in 1950 numbered 671, equivalent to a rate per 100,000 population of 20.86, the lowest ever recorded in New South Wales. Eleven clinics operated throughout the year, and all clinics and hospitals dealing with tuberculosis are functioning on a satisfactory basis. The number of x-rays taken at clinics and the private group service showed a substantial increase. B.C.G. vaccination has been undertaken at Royal North Shore Hospital, Canterbury District Hospital, Albion Street Clinic, Red Cross Clinic, Waterfall Sanatorium and Randwick Auxiliary Hospital.

Division of Social Hygiene.

The total number of notifications of venereal disease for this year is the lowest recorded since the Venereal Diseases Act, 1918, came into force in December, 1920. The decline in the yearly totals of notifications has continued since 1945 and the total for 1950 is 54.6 per cent. below that for 1946 and 19.4 per cent. below that of 1949. There has also been a decline in the number of persons seeking for the first time, examination and treatment at the Divisional Clinic. The prophylactic facilities of this clinic continue to be used by a large number of males and 17,423 treatments were given during the year. Action was taken against 400 persons for breach of section 5 of the Act (failure to continue under treatment).

Chemical Laboratory.

The Government Analyst presents a statistical report of the work of the Chemical Laboratory where the number of samples examined in 1950 amounted to 27,333. Of a total number of samples of milk examined in connection with the administration of the Pure Food Act, 572 (3.38 per cent.) were found to be adulterated. Police authorities forwarded 190 exhibits for examination and coroners required the examination of 772 exhibits in connection with 311 deaths. Examinations were also done for various State and Municipal authorities.

Food Inspections.

A special food handling campaign has been inaugurated with the aim of improvement of the standards of hygiene and cleanliness in restaurants, hotels and cafes, especially with regard to the cleansing of eating and drinking utensils. This campaign will be continued and expanded in the coming year.

A total of 7,040 samples were taken for analyses by departmental inspectors; 159 warnings were issued, 330 prosecutions were undertaken and £1,600 19s. 6d. was collected in fines and costs.

The Chief Food Inspector points out that the establishment of the branch has remained unchanged since 1920 and asks for an increase in the number of inspectors to police effectively the provisions of the Pure Food Act.

Private Hospitals.

Once again there has been a decrease in the number of licensed hospitals and this for 1950 was a loss of thirty-three hospitals representing a loss of 254 beds. No hospital controlled by the Bush Nursing Association or the Country Women's Association was closed permanently during the year. Supervision of private hospitals has been fully maintained during the year but the shortage of labour and materials has greatly delayed the required improvements and renovations. Overcrowding is the most frequent infringement of the clauses of the Private Hospitals Act.

Sanitation Branch.

In August a senior tracer was appointed to the branch to assist with the greatly increased volume of plans, search and other work relating to land notified as unhealthy building land under the Public Health Act. Seven hundred and fourteen inspections of noxious trades premises were made and the provisions of the Act were extended to the Municipality of Deniliquin.

Eleven local government councils were requested to appoint certificated health inspectors following investigations of their respective areas.

Fourteen prosecutions were instituted for breaches of various Acts, Regulations and Ordinances and fines and costs amounting to £102 12s. were imposed.

Medico-Legal Sections and Hospital Admission Depot.

The Government Medical Officers for Sydney and for Newcastle submit brief reports of the work done in their respective offices during 1950. In Sydney the number of vaccinations against smallpox showed a big increase as many of the vaccinations of intending travellers, formerly performed by Commonwealth Medical Officers, are now done by Departmental Medical Officers. In Sydney a total of 1,259 vaccinations were performed for the police force and the general public and an additional 493 International Certificates were issued confirming vaccinations by other medical practitioners. The Hospital Admission Depot continued to provide its service of arranging admissions to hospital and ambulance removals.

Consultative Council for the Physically Handicapped.

Dr. S. W. G. Ratcliff was appointed Chairman of the Council in August, 1950, and during the year thirteen meetings of the Council and twelve of the executive Committee were held.

The increased incidence of poliomyelitis in New South Wales which started towards the end of last year continued throughout this year and rose rapidly in November and December. 68.2 per cent. of the total of 770 cases occurring in 1950 were under the age of 15 years. Fifty-one cases were fatal, and of these over 1 year old the greatest mortality was in 15-19 years age group. Information about the types of illness and severity is still being collected and will be incorporated in a later report. As a result of the epidemic there was an increased number of applications for financial and after-care assistance, and expenditure in these items amounted to £413 15s. 2d. Eight persons were assisted under the Vocational Training Grant, and the expenditure in this amounted to £259 7s. 2d.

Pathological Laboratories.

The number of laboratory examinations carried out during the year was approximately the same as last year, and the revenue collected from charges for these, sales of media, etc., was £540 17s. 6d. During the year there has been an increase in the total number of examinations in connection with Salmonella infections and the laboratory assisted in the detection of a typhoid carrier in a small outbreak in the New Hebrides.

Shortage of guinea pigs hampered to some extent, the performance of diptheria virulence tests and the examination of milk for tuberculosis and Brucella Abortis.

The overcrowded conditions of the Laboratory greatly hinder the present amount of work carried out and make impossible any extension of the laboratory's activities.

Division of Industrial Hygiene.

Dr. C. J. Cummins, who was appointed Director in February, 1950, in his comprehensive report of the year's activities, states there was a marked increase in the amount of work carried out by the Division. This was due largely to its functions becoming more widely known and appreciated by both employer and employee organisations. The health survey in the gas industry in New South Wales, requested by the Royal Commission of Inquiry into the industry in 1949, is well advanced and some preliminary reports have been submitted. It is hoped to complete the survey by March, 1951. Four members of the Division attended the I.L.O. Conference of Experts in Pneumoconiosis held at Sydney in February.

Division of Maternal and Baby Welfare

Ten pre-natal clinics are now conducted at Baby Health Centres in the metropolitan area and total attendances at these showed an increase of 6,048 on the previous year. Three departmental dietitians visit eight of these clinics regularly, and the nutritional instruction given is a very important factor in the prevention and control of toxaemia of pregnancy. This year a new mobile blood transfusion unit was established at St. George Hospital. During the year, it was arranged for twenty-one hospitals to supply plasma as required in urgent cases. The Maternal Mortality rate, including Criminal Abortion for 1950, was the lowest on record, but the Division is not complacent about this, as toxaemia of pregnancy is still the cause of the majority of maternal deaths.

Eleven new buildings were completed and operated as Baby Health Centres during the year and the pre-school child health service was continued.

Health Education.

The amount of money made available for health education purposes in 1950 was £10,000, but rising costs severely limited the activities of the Publicity Branch. Features of the year's work were the poliomyelitis publicity campaign and the food handling campaign. The Branch gave assistance to thirty metropolitan and thirty-eight country councils in their "Health Weeks" and was a major exhibitor at the Sydney Health Week exhibition. The branch had another successful year in the use of films for educational purposes.

Nutrition Section.

Nutrition education was conducted by the dietitians by the preparation of press articles, radio scripts, leaflets, answers to enquiries and lectures. At some of the State Hospitals and Institutions, the food services were reported on and assistance given. In collaboration with the Director of Maternal and Baby Welfare, menus and recipes for feeding children in migrant camps were prepared for the Commonwealth Department of Labour and National Service. Among other activities, the secretarial work of the N.S.W. Institute of Dietitians is done within this Section.

School Medical Service.

During 1950, the number of full-time medical officers in this Service was six short of that establishment (twenty-nine). There are also employed: 3 part-time medical officers, 14 school nurses, 1 speech therapist, and 4 psychologists, and 4 social workers have been seconded from the Education Department.

Four Child Guidance Clinics continued to carry out the examination and investigation of children referred by parents, Education Department, Child Welfare Department, Children's Court, and other bodies and authorities.

Hearing surveys have been conducted in metropolitan and country districts, and particular attention has also been given to children in the Departmental Opportunity Deaf Classes.

An asthma survey has shown the important part played by colds in the ill-health of asthmatic children and the good results that can be obtained by bringing these colds under control

Division of Dental Services.

The establishment for this Division provides for twenty-two dental officers and twelve dental assistants, and most of the work of the Division is connected with the School Dental Service. Further consideration has been given to the provision of a more adequate dental service for the schools by the appointment and training of dental hygienists on lines similar to those in operation in New Zealand.

The Dental Service to State Hospitals and Homes and State Penitentiaries has been improved by the appointment of three full-time dental officers, and by providing better accommodation and modern equipment.

Health Districts.

Metropolitan Health District.—The Medical Officer of Health reports that the excessive rains of 1950 caused considerable dislocation of the sanitary services in the outer suburbs where sewers have not yet been constructed. In spite of this there was not any marked outbreak of intestinal disease, only six cases of typhoid being reported.

In the huge housing programme undertaken by the Housing Commission there has been a failure to plan for the sanitary drainage of the new estates and this has given much concern to this office, but action, as the result of recent conferences arranged between the interested authorities, will, it is hoped, prevent these problems arising in future in housing estates in unsewered areas.

Cases in the poliomyelitis epidemic in the metropolitan area occurred in fairly regular numbers throughout the year with no district specially marked out.

Hunter River Health District.—This district also experienced the State-wide increase in poliomyelitis incidence, ninety-five cases (eight deaths) being reported, compared with ten cases (one death) in 1949.

B.C.G. vaccination of child contacts of tuberculosis cases was begun last July.

There were 8,793 attendances at the Chest Clinic in 1950, as compared with 1,996 in 1949.

Rapid development is occurring in the unsewered outskirts of Newcastle, resulting in need for extension of scavenging services and creating problems in regard to sullage disposal.

South Coast Health District.—One hundred and seventeen cases, with six deaths of infectious diseases, were notified for the year, compared with ninety-three cases and three deaths in 1949. This increase was mainly due to rises in the number of cases of diphtheria (twenty-seven compared with sixteen) and of poliomyelitis (thirty-nine cases, one death, compared with six cases). The majority of cases of poliomyelitis occurred in the two most densely populated sections of the Health District, viz., the Sutherland Shire and the City of Greater Wollongong. The work of this office has increased noticeably during the year and the routine work of inspections, investigations of complaints, and supervision of sanitary matters generally, has been heavy.

Mitchell Health District.—During the year, the Medical Officer of Health, because of the lack of housing accommodation, has retained his headquarters in Sydney and has visited the district on a part-time basis. In this district during the year, there was a great increase in the number of cases of searlet fever and of poliomyelitis. The provisions of the Noxious Trades Act were extended to Lyndhurst Shire in December. In a tuberculosis survey, in the district carried out by the Anti-T.B. Association, a relatively high percentage of patients showing radiological evidence of tuberculosis was found at Orange Mental Hospital.

Richmond-Tweed Health District.—In his third annual report the Medical Officer of Health reports that floods during the year dislocated sanitary services in many places, but these were put back in operation in a very short time by the local authorities, and in connection with these conditions, there was no increase in notifiable infectious diseases. Seven cases of poliomyelitis occurred, six of them during the last months of the year, and it would appear that the epidemic of this disease is about to spread from the southern districts to this area. It is felt that improvement in the sanitation of this District has continued during the year.

Broken Hill and District.—The Medical Officer of Health's report is for the year ended 30th June, 1950.

The incidence of notifiable infectious diseases in this District for the year ended 31st December, 1950, is shown in Tables VI, VII, VIII and IX in the Government Statistician's section of the general report.

E. Sydney Morris,
Director-General of Public Health.

VITAL STATISTICS OF NEW SOUTH WALES FOR THE YEAR 1950.

(Prepared by the Government Statistician, Mr. S. R. Carver.)

Population:

The population at the end of 1950 was 3,278,026, of whom 1,649,479 were males and 1,628,547 females. During the year the increase in population by excess of births over deaths was 40,627, and by migration 61,464, making a total increase for the year of 102,091. The mean population for the year 1950 was 3,224,892.

Live Births:

The total number of live births was 71,592, equivalent to 22.20 per 1,000 of mean population, which rate is 0.4 per cent. below the average of the previous five years. Of this number, 36,783 were males, and 34,809 were females, the proportion being 105.67 males to 100 females.

Dividing the State into the Metropolis and the Remainder of the State, there were 29,643 births to mothers resident in the former and 41,949 in the latter, corresponding to rates of 18.92 and 25.30 respectively.

Stillbirths:

The number of stillbirths registered was 1,406 (786 males and 620 females) which is 1.93 per cent. of all births, live and still, and equal to 0.44 per 1,000 population. In the Metropolis there were 570 stillbirths, and in the Remainder of the State, 836, representing 1.89 and 1.95 per cent. of all births, live and still, in the respective divisions.

Deaths.

The deaths during the year numbered 30,965, equivalent to a rate of 9.60 per 1,000 of population. This rate is 0.1 per cent. above the average of the previous five years.

The total includes 17,565 males and 13,400 females, equivalent to a rate of 10.83 and 8.36 respectively per 1,000 of mean population. The rate in the Metropolis was 10.44 per 1,000, and in the Remainder of the State, 8.81.

Of the 30,965 people who died during the year, 2,364 were under 5 years of age 11,353 were aged 5 to 64 years, and 17,248 were 65 years and over. The rates per 1,000 of population in the main groups under and over 5 years were 7.01 and 9.91.

Infantile Mortality.

The number of children under 1 year of age who died was 1,936, equal to 27.04 per 1,000 live births. To this total the Metropolis contributed 754 or 25.44 per 1,000 live births, and the Remainder of the State 1,182 or 28.18 per 1,000 live births. The rate for 1950 is 9 per cent. below the average of the previous five years. Of the deaths under 1 year of age, 1,157 or 60 per cent. occurred under one week; 1,345 or 69 per cent. under 1 month, and 1,510 or 78 per cent. under three months.

Causes of Deaths, New South Wales, 1950.

Classified in accordance with the Sixth Revision of the International Lists of Diseases and Causes of Death.

The statistics of causes of death for the year 1950, shown on pages 1 to 5 hereof, compiled in accordance with the Sixth Revision of the International Lists of Diseases and Causes of Deaths, are not comparable with similar statistics for the years 1940 to 1949 compiled in accordance with the Fifth Revision of the International Lists. Apart from the changes in the allocation of diseases to the various categories, and of categories to the various sections of the classification, apparent from scrutiny of the respective International Lists, the Sixth Revision places much greater emphasis than was hitherto the case upon the order of occurrence of a disease in the sequence of events leading to death, as stated in the death certificate, in deciding the order of preference between causes of death, where a joint cause is given. This latter change in method of classification has affected the comparability of the statistics for the different years to a significant extent.

The principal causes of death in 1950 are shown in the statement on pages 8-10, and reference is made below to the more prominent of these causes.

Infective and Parasitic Diseases (International Code Nos. 001-138).—Deaths in 1950 from infective and parasitic diseases numbered 1,037, representing a rate of 322 per million of mean population. Included in this section is tuberculosis (Code Nos. 001-019), which was responsible for 671 of the deaths, equal to a rate of 208 per million of mean population. The deaths from tuberculosis comprised 634 from tuberculosis of the respiratory system (Code Nos. 001-008) and 37 from other forms of tuberculosis (Code Nos. 010-019), the rates per million of mean population being 197 and 11 respectively.

Of the persons dying from tuberculosis of the respiratory system, 461 were males and 173 females, the rates per million of each sex being 284 and 108 respectively.

Under the Sixth Revision of the International Lists, the disease influenza is allocated to the section "Diseases of the Respiratory System" instead of, as formely, to "Infective and Parasitic Diseases".

Malignant Neoplasms (Code Nos. 140-199) and Neoplasm of Lymphatic and Haematopoietic Tissue (Code Nos. 200-205).—Deaths from the above causes numbered 3,985, equal to a rate of 1,236 per million of mean population. The deaths of males numbered 2,058 and of females 1,927, the rates per million of each sex being 1,269 and 1,202 respectively. Of the total deaths, malignant neoplasms caused 3,742 and neoplasm of lymphatic and haematopoietic tissue 243, the mortality rate being 1,160 and 76 per million respectively.

Neoplasms of lymphatic and haematopoietic tissue are a new grouping and include certain diseases not formerly regarded as neoplasms. Hodgkin's disease and mycosis fungoides were formerly classified as infective and parasitic diseases, and leukaemia and aleukaemia as diseases of blood and blood forming organs.

Vascular Lesions affecting central nervous system (Code Nos. 330-334).—In 1950, vascular lesions affecting the central nervous system caused 3,765 deaths, equal to a rate of 1,167 per million of mean population. This total comprised the following—

International Code No.	Cause.	Number of Deaths.
330 331 332 334	Subarachnoid haemorrhage	127 2,273 1,158 207
	Total	3,765

Of the total, 1,704 were males and 2,061 females, corresponding respectively to rates of 1,051 and 1,285 per million of mean population.

Diseases of the Circulatory System (Code Nos. 400-468).—Diseases of the circulatory system were the cause of 11,522 deaths, the rate being 3,573 per million of mean population. Of the total, 6,838 were males and 4,684 females, corresponding respectively to rates of 4,218 and 2,921 per million of each sex.

Of the total deaths due to diseases of the circulatory system, rheumatic fever and chronic rheumatic heart disease (Code Nos. 400-416) caused 310, equal to a rate of 96 per million.

Arteriosclerotic and degenerative heart disease (Code Nos. 420-422) accounted for 8,175 deaths, the mortality rate being 2,535 per million of mean population, deaths of males from this cause numbering 4,992 and females 3,183, the corresponding rates being 3,079 and 1,985 per million of each sex.

Other diseases of the heart (Code Nos. 430-434) caused 1,104 deaths, equal to a rate of 342 per million.

Hypertensive disease (Code No. 440-447) caused 1,254 deaths, the rate being 389 per million.

Deaths due to other diseases of the circulatory system numbered 679, equal to a rate of 211 per million.

Bronehitis (Code Nos. 500-502) and Pneumonia (Code Nos. 490-493).—In 1950, bronchitis was the cause of 403 deaths, comprised of 282 males and 121 females. Corresponding rate for males was 174, for females 75 and for persons 125 per million of mean population.

Of the 1,058 deaths from pneumonia, 617 were of males and 441 of females, and respective rates were 328, 381 and 275 per million of mean population.

Nephritis and Nephrosis (Code Nos. 590-594).—During the year there were 1,073 deaths due to diseases of the genitourinary system (Code Nos. 590-637), of which 697 were caused by nephritis and nephrosis. The mortality rate for nephritis and nephrosis was 216 per million of mean population, for males 222 per million, and for females 210 per million.

Mortality of Infants.—The table on page 5 shows the number of deaths of children under 1 year of age and mortality rate per 1,000 live births for the principal causes of deaths.

Causes of Death,* New South Wales, 1950.

Inter-	Causes of Death,* New South Wates, 1950.	Nuı	nber of Dear	ths.
national Code No.	Cause of Death.	Males.	Females.	Persons.
001-138	INFECTIVE AND PARASITIC DISEASES	712	325	1,037
001-008	Tuberculosis of respiratory system	$\begin{array}{c} 461 \\ 13 \end{array}$	173 8	$\begin{array}{c} 634 \\ 21 \end{array}$
011-019 020-029	Tuberculosis, other forms	10 66	$\begin{array}{c} 6 \\ 21 \end{array}$	$\begin{array}{c c} & 16 \\ 87 \end{array}$
040-041	Typhoid and paratyphoid fever	2	2	4
$045-048 \\ 050$	Dysentery	7	$egin{array}{c} 4 \ 1 \end{array}$	11
052	Erysipilas	2	1	3
$\begin{bmatrix} 055 \\ 056 \end{bmatrix}$	Diphtheria Whooping cough	$\frac{13}{3}$	11 4	24 7
057 061	Meningococcal infections	$\frac{25}{17}$	16 8	41 25
080	Acute poliomyelitis	36	19	55
$081 \\ 082$	Late effects of acute poliomyelitis		 5	8
083	Late effects of acute infectious encephalitis	1	2	3
$\begin{array}{c} 085 \\ 092 \end{array}$	Measles Infectious hepatitis	11 10	$\begin{vmatrix} 14 \\ 9 \end{vmatrix}$	$\begin{array}{c c} 25 \\ 19 \end{array}$
140-239	Other infective and parasitic diseases NEOPLASMS	$\begin{array}{c} 32 \\ 2,136 \end{array}$	$21 \\ 2,032$	53 4,168
140-199	Malignant neoplasms	1,918	1,824	3,742
$ \begin{array}{c c} 200-205 \\ 214-239 \end{array} $	Neoplasm of lymphatic and haematopoietic tissue	$\begin{array}{c} 140 \\ 78 \end{array}$	$\begin{array}{c} 103 \\ 105 \end{array}$	243 183
240-289	ALLERGIC, ENDOCRINE SYSTEM, METABOLIC AND NUTRITIONAL DISEASES	273	377	650
$\begin{bmatrix} 260 \\ 280-286 \end{bmatrix}$	Diabetes mellitus	$\begin{array}{c} 135 \\ 11 \end{array}$	$\begin{array}{c c} 254 \\ 12 \end{array}$	$\begin{array}{c} 389 \\ 23 \end{array}$
290-299	Other allergic, endocrine system, metabolic, and nutritional diseases	127 65	111	$\frac{238}{162}$
300-299	Mental, Psychoneurotic and Personality Disorders	122	64	186
330-398	DISORDERS OF THE NERVOUS SYSTEM AND SENSE ORGANS	1,975	2,310	4,285
331	Cerebral haemorrhage	1,046	1,227	2,273
$ \begin{array}{c c} 332 \\ 330-333,334 \end{array} $	Cerebral embolism and thrombosis	514 144	$\begin{array}{c c} & 644 \\ & 190 \end{array}$	$\begin{array}{c c} 1,158 \\ 334 \end{array}$
340	Meningitis, except meningococcal and tuberculous	$\overline{32}$	37	69
$\begin{array}{c c} 343 \\ 341 - 342 \end{array}$	Encephalitis, myelitis and encephalomyelitis (except acute infectious)		15 197	41
344-398 <i>\(\)</i>	DISEASES OF THE CIRCULATORY SYSTEM	213 6,838	4,684	410
400-416	Rheumatic fever and chronic rheumatic heart disease	153	157	11,522 310
420–422 430–434	Arteriosclerotic and degenerative heart disease	4,992 712	$\frac{3,183}{392}$	8,175 1,104
440-447	Hypertensive disease	661	593	1,254
450–456 460–468	Diseases of arteries Diseases of voins and other diseases of circulatory system	$\begin{array}{c} 301 \\ 19 \end{array}$	$\begin{array}{c c} 325 \\ 34 \end{array}$	$\begin{array}{ c c c c }\hline 626\\ 53 \end{array}$
470-527 480-483	DISEASES OF THE RESPIRATORY SYSTEM Influenza	1,227 69	757 78	1,984
490-493	Pneumonia	617	441	147 1,058
500-502 470-475	Bronchitis		121	403
510-527	Other diseases of the repiratory system	259	117	376
530-587 540-545	Diseases of stomach and duodenum	$\begin{array}{c} 698 \\ 180 \end{array}$	$\begin{array}{c c} 451 \\ 31 \end{array}$	1,149 211
550-553 560-561	Appendicitis Hernia of the abdominal cavity	$\begin{array}{c} 40 \\ 62 \end{array}$	29 37	69 99
570	Intestinal obstruction without mention of hernia	82	76	158
$\begin{array}{c c} 571 \\ 572 \end{array}$	Gastro-enteritis and colitis except ulcerative, age four weeks and over Chronic enteritis and ulcerative colitis	$\begin{array}{c} 75 \\ 26 \end{array}$	$\begin{array}{c c} 64 \\ 27 \end{array}$	$\begin{array}{c c} & 139 \\ & 53 \end{array}$
576-577	Peritonitis and peritoneal adhesions	9	7	16
581	Other diseases of digestive system	$\begin{array}{c} 112 \\ 112 \end{array}$	40 140	$\begin{array}{c c} 152 \\ 252 \end{array}$
590-637 590-594	Diseases of Genito-Urinary System	651	422	1,073
610-612	Diseases of the prostate	$\frac{360}{198}$	337	$ \begin{array}{c c} 697 \\ 198 \end{array} $
$600-609 \ 613-637$	Other diseases of the genito-urinary system	93	85	178
640-689	Deliveries and Complications of Pregnancy, Childbirth and Puerperium	•••	80	80
$\begin{bmatrix} 640-649 \\ 650-652 \end{bmatrix}$	Complications of pregnancy	•••	28	28
6502-6512	Criminal	•••	10	10
	Other	•••	4	4
670–678 680–689	Complications of delivery		$\overline{26}$	26
690-716	Diseases of the Skin and Cellular Tissue	23	12 17	12 40
720-749 750-759	Diseases of the Bones and Organs of Movement	30 177	53 147	83 324
760-776 760-761	CERTAIN DISEASES OF EARLY INFANCY	707	484	1,191
762	Postnatal asphyxia and atelectasis	$\begin{array}{c} 161 \\ 63 \end{array}$	92 53	$\begin{array}{c c} 253 \\ 116 \end{array}$
776 763–775	Immaturity unqualifiedOther diseases of early infancy	$\begin{array}{c} 279 \\ 204 \end{array}$	204	483
780-795	Symptoms, Senility and Ill-defined Conditions	496	135 573	339 1,069
794 780–793, 795	Senility without mention of psychosisOther symptoms and ill-defined conditions	$\begin{array}{c} 396 \\ 100 \end{array}$	504 69	900 169
E800-E999	Accidents, Poisonings and Violence	1,435	527	1,962
E800-E936 E970-E979	Accidents Suicide	1,184 225	$\begin{array}{c} 419 \\ 92 \end{array}$	1,603 317
E940-E965 E980-E999	} Other violence	26	16	42
PREFIT-DOOFT	All Causes	17,565	13,400	30,965
		1 4 4 3 (12)	1.3 4.1111	411 1165

The causes of death in the preceding table have been compiled according to the sixth revision of the International List. For purposes of comparison a similar table has been drawn up for 1950 showing the causes of death as elassified according to the fifth revision (1938) of the International List. The fifth revision has been used in previous reports for such classifications.

Causes of Death,* New South Wales, 1950.

Cause of Death.*	Number 1950.	Average Annual Number 1945-49. (a)	Increase or Decrease (—) in 1950. (b)
Typhoid Fever (including Paratyphoid) Cerebrospinal (meningococal) Meningitis Searlet Fever Whooping Cough Diphtheria Erysipelas Tetanus Tetanus Tetanus Tetanus Tuberculosis of the Respiratory System Tuberculosis of Meninges and Central Nervous System Other Tuberculosis Other Tuberculosis Other Tuberculosis Other Tuberculosis System Other Tuberculosis Other Tuberculosis Dysentery Syphilis Influenza with respiratory complications specified Influenza with respiratory complications specified Mensles Unifluenza with respiratory complications specified Mensles Other Infective and Parasitic Diseases Diseases of the Blood Chronic Poisoning and Intoxication Encephalitis and Meninglitis (non-epidemic) Cerebral Haemorrhage Cerebral Embolism, Thrombosis, Softening and Humiplegia Other Infractanual Efficions Infunite Convulsions Infunite Convulsions Other Diseases of the Nevrous System Diseases of the Heart Arteriosclerosis and Other Diseases of Arteries Other Diseases of the Nevrous System Diseases of the Respiratory System Diseases of the Diseases Other Diseases of the Servous System Diseases of the Diseases Other Diseases of the Servous System Diseases of the Diseases Other Diseases of the Servous System Diseases of the Serv	4 41 1 7 25 25 25 652 20 17 11 99 90 45 26 56 8 105 3,925 552 387 7 268 105 94 2,348 1,163 12 10 382 10,478 632 207 309 1,203 396 150 130 71 74 249 173 144 355 1,131 352 10 6 10 54 332 31 634 445 912 317 1,614 33 156 30,965	2 30 4 37 60 3 28 842 23 39 10 139 53 42 26 28 10 94 3,851 575 410 2 268 63 97 2,288 1,044 11 13 370 10,121 581 139 242 1,325 360 167 101 80 112 268 10 112 113 114 115 116 117 117 118 119 119 119 119 110 1110	per cent. 165 36 (-) 76 (-) 81 (-) 58 (-) 38 (-) 12 (-) 23 (-) 12 (-) 57 11 (-) 29 71 (-) 12 (-) 4 (-) 6 195 (-) 3 11 (-) 20 3 4 9 49 28 (-) 9 10 (-) 10 29 (-) 12 (-) 34 (-) 7 38 (-) 36 (-) 3 (-) 9 (-) 12 (-) 37 (-) 8 (-) 37 (-) 8 (-) 37 (-) 8 (-) 37 (-) 8 (-) 9 (-) 15 (-) 28 (-) 9 (-) 15 (-) 28 (-) 9 (-) 15 (-) 28 (-) 9
Total	30,965	30,932	•••

⁽a) Adjusted to the mean population of 1950, viz., 3,224,892.

⁽b) The percentage increase or decrease is calculated from the precise average for 1945–49 and not from the adjusted whole number shown here. When the number of deaths is small a difference in the percentages on the two bases is apparent.

^{*}Classified on the basis of the Fifth Revision (1938) of the International List.

Causes of Death* of Infants under 1 year of age, New South Wales, 1950.

International	Cause of Death.	Nun	nber of Dea	aths.	Rate pe	r 1,000 Liv	e Births.
Code Number.	Cause of Death.	Males.	Females.	Persons.	Males.	Females.	Persons
001-019 020-029 057 080-081 082-083 030-056, 058-074, 084-138 340 490-493 500-502 571 750-759 7600, 7610 7605, 7615 7620 7625 7630 7635 7640 7645 7650, 7660, 7670, 7680, 7690-7694, 7700-7702, 7710, 7720, 7730. 7655, 7665, 7675, 7685, 7695-7699, 7705-7707, 7715, 7725, 7735. 774 776 E800-E999 	Tuberculosis Syphilis and its sequelae Meningococcal infections Poliomyelitis Infectious encephalitis Other infective and parasitic diseases Meningitis, except meningococcal and tuberculous Pneumonia (age 4 weeks and over) Bronchitis Gastro-enteritis and colitis, except ulcerative (age 4 weeks and over) Congenital malformations Injury at birth, without mention of immaturity Injury at birth, with immaturity Postnatal asphyxia and atelectasis, without mention of immaturity. Postnatal asphyxia and atelectasis, with immaturity Pneumonia of newborn, without mention of immaturity. Pneumonia of newborn, with immaturity Diarrhoea of newborn, with out mention of immaturity Other diseases of early infancy, without mention of immaturity Immaturity with mention of any other subsidiary condition Immaturity unqualified Accidents, poisonings and violence All other causes	5 2 14 17 64	2 4 12 16 55 58 115 65 27 42 11 23 8 4 55 43 42 17 72	2 9 2 26 33 119 16 81 250 1777 76 85 31 55 10 12 148 110 4 483 51 156	 0·14 0·05 0·38 0·46 1·74 0·30 1·17 3·67 3·05 1·33 1·17 0·54 0·87 0·05 0·22 2·53 1·82	0·06 0·11 0·34 0·46 1·58 0·14 1·09 3·30 1·87 0·78 1·21 0·32 0·66 0·23 0·11 1·58 1·24 0·06 5·86 0·49 2·07	0.03 0.12 0.03 0.36 0.46 1.66 0.22 1.13 3.49 2.47 1.06 1.19 0.43 0.77 0.14 0.17 2.07 1.54 0.06 6.75 0.71 2.18
	All Causes	1,116	820	1,936	30.34	23.56	27.04

^{*} Based on the Sixth Revision of the International Lists of Diseases and Causes of Death.

SECTION 1.

A. COMMUNICABLE DISEASES, 1950.

NOTIFIABLE INFECTIOUS DISEASES RECORDED IN NEW SOUTH WALES DURING THE YEAR ENDED 31st DECEMBER, 1950.

Public Health Acts, 1902-1937.

The Public Health Act, 1902, provides that the Governor may, by proclamation in the Government Gazette, declare that any disease therein named is an infectious disease.

			Ca	ses and De	aths Notific	ed.	
	Notifiable from—	19	948.	19)49.	19	50.*
		Cases.	Deaths.	Cases.	Deaths.	Cases.	Deaths
Typhoid Fever and Paratyphoid	1st January, 1898	17	2	6	•••	16	4
Scarlet Fever	,, ,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,	1,358	4	1,514	3	1,052	î
Diphtheria or Membranous Croup	pp ***	600	51	627	36	390	24
Bubonic Plague	23rd January, 1900			•••			• • •
Infantile Paralysis (including any form of Acute Anterior Poliomyelitis, polioencephalitis or Poliomyeloencephalitis).	1st February, 1912. Definition re-proclaimed 14th August, 1931.	87	5	182	8	789†	55
Epidemic Cerebro-spinal Fever (Meningococcal Meningitis).	11th October, 1915	82	29	87	30	98	21
Encephalitis Lethargica	1st April, 1926 12th August, 1927	•••	1	6	4	2	• • •
Typhus Fever	,,	12	1	11	1	21	* * *
Vellow Fever Ouerperal Infection	16th August, 1929	${72}$	22	26	22	14	9
Indulant Fever	13th August, 1937	• • •		4		1	**
eprosy	25th February, 1938	3		î	• • •	i	• • •
uberculosis (all forms)	14th May, 1945	1,711	815	1,641	769	1,787	671
mallpox	17th September, 1948	•••	•••		•••		•••
	Total	3,942	930	4,105	873	4,171	785
	Population at 31st December	3,06	2,344	3,17	5,935	3,278	3,026

^{*} VI International Classification.

† Classified according to date of receipt of notification.

Public Health Act, 1902.

A total of 4,171 cases of infectious diseases was notified under the Public Health Act, 1902, during 1950 or 66 more cases than in 1949. The number of cases notified from the 147 municipalities, 134 shires and the unincorporated portion of the western division; the deaths due to these infections; the age and sex of the patients; and the seasonal incidence of the various diseases are shown in appended Table I-IX (pp. 13-29). As indicated below, pulmonary tuberculosis is notifiable under the Public Health (Amendment) Act, 1915; and venereal diseases under the Vexereal Diseases Act, 1918.

Public Health (Amendment) Act, 1915.

Pulmonary Tuberculosis was made a notifiable disease under an amendment of the Public Health Act in 1915. In 1950 registered cases amounted to 1,787, an increase of 146 on the registrations received in 1949. There were 671 deaths, or an decrease of 98 compared with the deaths recorded in 1949. A survey by the Director of the Tuberculosis Division is on p. 60.

Venereal Diseases Act, 1918.

Cases of venereal diseases notified in 1950 numbered 2,453, a decrease of 590 cases on the number (3,043) received in 1949. The report of the Director of the Division is on p. 31,

GRAPH I.

Annual Death Rate per 1,000 of the Population in New South Wales, 1875–1950.

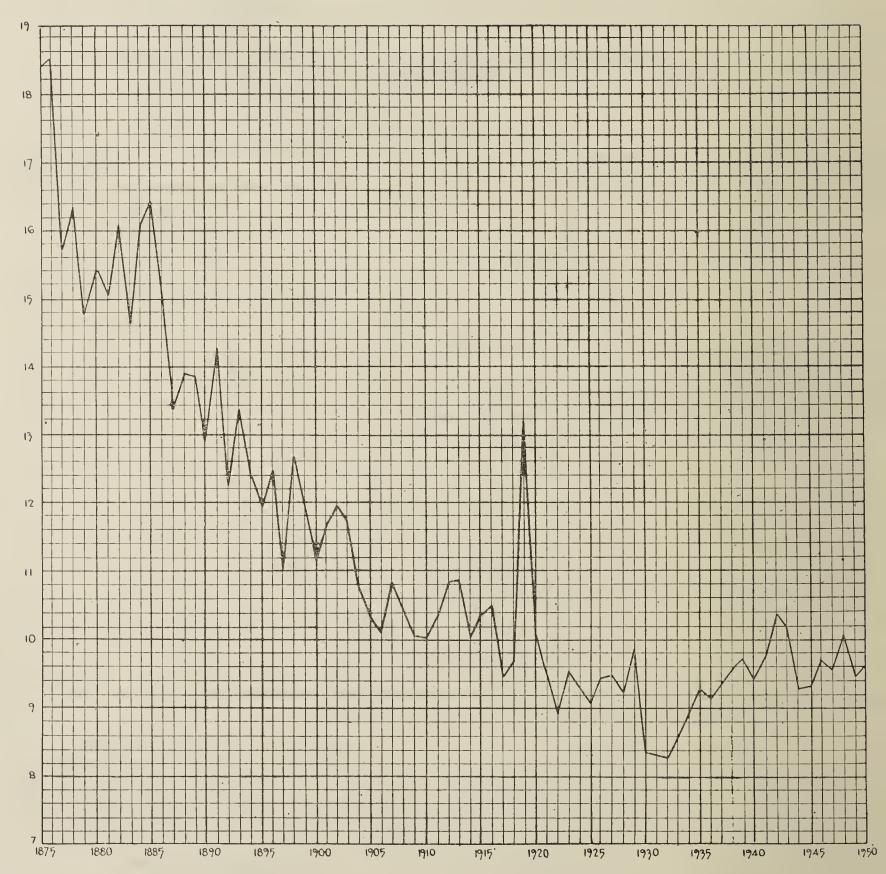


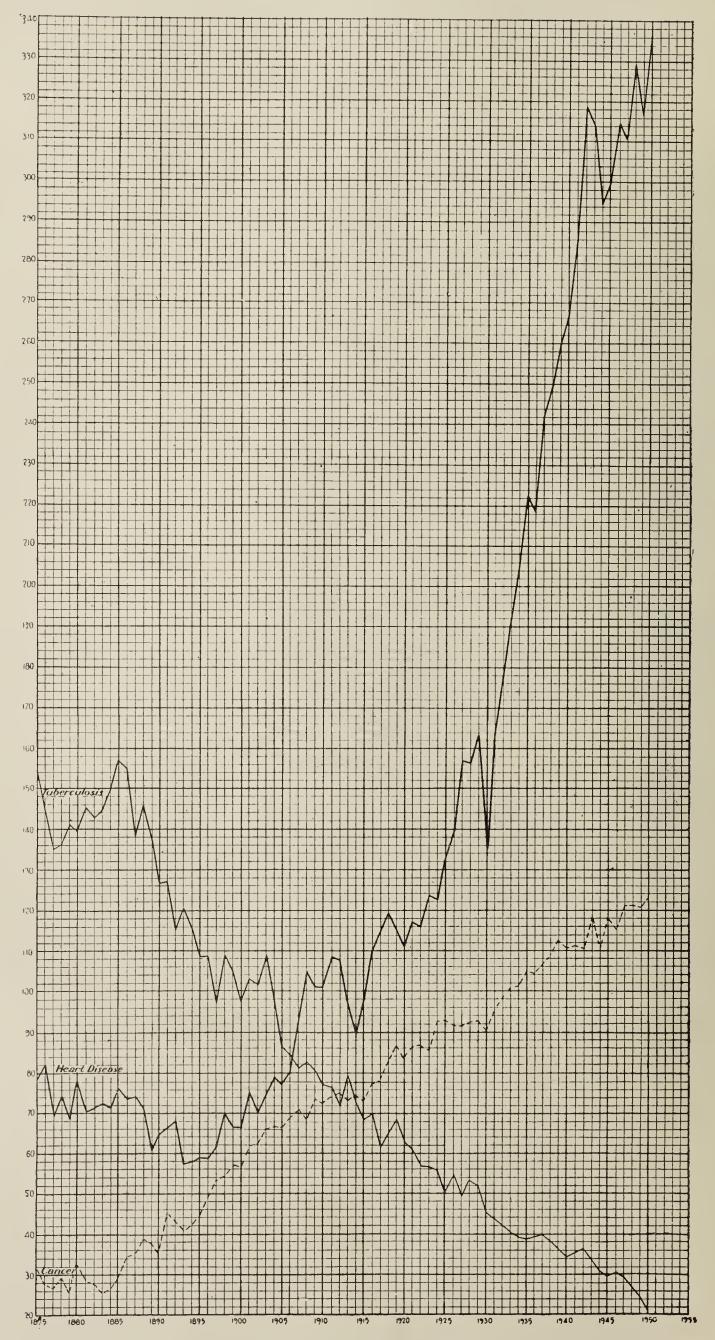
Table I.—Notifiable Infectious Diseases—Cases and Deaths, Each Local Arca in the Metropolitan Health District, 1950.

Municipality or Shire.	Estimated Mean Population.	Typho Paraty Fev	phoid	Sca Fev		Dipht	heria.	Infa Paral		Cerel spir Menin	nal	Enco hali Lethar	tis	Typ Fev	hus er.	Puer Infec		cul	ber- osis orms).
	z op diavioni	C.	D.	C.	D.	С.	D.	С.	D.	С.	D.	С.	D.	С.	D.	C.	D.	C.	D.
						Mu	NICIPA	LITIES											
Sydney, City of Ashfield Auburn Bankstown Botany Burwood Canterbury Concord Drummoyne Fairfield Holroyd Hunter's Hill Hurstville Kogarah Ku-ring-gai Lane Cove Leichhardt Liverpool Manly Marrickville Mosman North Sydney Parramatta Randwick Rockdale Ryde Strathfield Waverley Willoughby Woollahra	$\begin{array}{c} 42,910 \\ 45,590 \\ 63,900 \\ 29,920 \\ 34,510 \\ 110,450 \\ 30,990 \\ 33,510 \\ 35,240 \\ 30,310 \\ 12,090 \\ 40,960 \\ 43,520 \\ 45,170 \\ 22,030 \\ 69,130 \\ 18,360 \\ 35,350 \\ 82,480 \\ 26,810 \\ 60,730 \\ 66,360 \\ \end{array}$	1		62 7 3 26 6 9 35 8 7 12 9 6 15 16 19 3 25 9 4 23 3 8 21 47 18 23 13 27 14 11	SHIRE	38 3 4 7 3 11 1 4 10 6 2 1 3 21 1 6 4 11 7 5 1 5 S AND	1	31 22 8 13 4 8 26 11 5 7 10 4 17 1 12 13 17 4 12 15 3 6 20 21 19 6 7 16 12 21	4 3 2 1	18 2 1 2 5 2 2 1 4 1 1 2 1 4 2 1 1 2 2	2 1 1							245 33 25 35 14 25 59 26 14 21 20 8 18 19 130 14 65 9 15 56 17 42 48 91 31 14 15 73 29 38	123 7 11 10 4 9 20 8 7 12 3 2 6 6 19 4 24 3 4 22 6 18 16 35 10 3 3 17 6 11
Hornsby Warringah Harbour of Port Jackson	35,080 41,740			9 4	•••	$\begin{vmatrix} 2 \\ 6 \end{vmatrix}$	1	5 9	 1	1	•••		• • •	•••	•••	•••	··· 1	18	$\begin{bmatrix} 9 \\ 6 \end{bmatrix}$
Total	1,711,290	6	1	502	•••	162	9	385	20	55	9		•••	6		9	4	1285	444

^{*} Undulant Fever—Ku-ring-gai Municipality, 1 case, nil deaths.

GRAPH 2.

Cancer, Tuberculosis and Heart Disease—Annual Death Rate per 100,000 of Population in New South Wales 1875–1950.



From 1950 all death rates are compiled according to the VIth International classification.

Table II.—Notifiable Infectious Diseases—Cases and Deaths, Each Local Area in the Hunter River Health District, 1950.

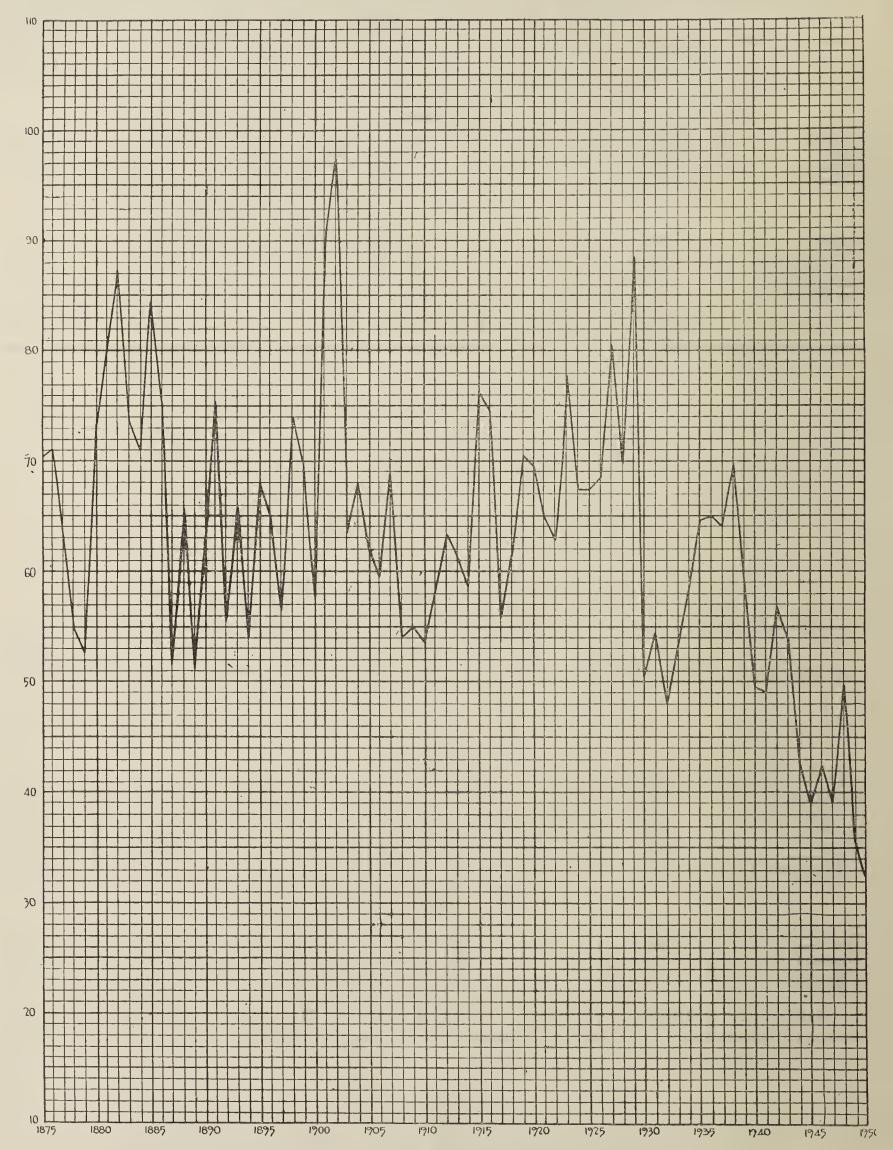
Municipality or Shire.	Estimated Mean	Typho Paraty Fev	phoid	Scar Fev		Diphtl	heria.	Infan Paraly		Cerel spin Menin	al	Enc hali Lethai	${ m tis}$	Typ! Fev		Puer _I Infect		Tul culo (all fo	osis
	Population.	С.	D.	С.	D.	С.	D.	с.	D.	c.	D.	C.	D.	с.	D.	c.	D.	С.	D.
						Munic	IPALIT	TIES.											
Newcastle	13,600 20,800	4	•••	$\left \begin{array}{c}17\\2\\7\\\end{array}\right $	•••	22	 	$\left \begin{array}{c}42\\1\\8\\2\end{array}\right $	7 1 	3 1 1	1	•••	•••	2	• • •	•••	•••	$\left egin{array}{c} 65 \\ 9 \\ 4 \\ 5 \end{array} \right $	36 3 2
					Shire	S AND	Port	HUNT	CER.										
Kearsley Lake Macquarie Lower Hunter Port Stephens Port Hunter	48,680 6,640 7,070	•••	•••	23 4 	•••	19 2 1	 2 	$\begin{bmatrix} 6 \\ 18 \\ 6 \\ 1 \\ \cdots \end{bmatrix}$	 4 1 	 	•••	•••	•••	•••	• • • •	•••	 1	11 24 3 1	1 6 1 2
Total	265,750	4	•••	53	•••	44	3	84	13	7	1			2			1	122	51

Table III.—Notifiable Infectious Diseases—Cases and Deaths, Each Local Area in the South Coast Health District, 1950.

C. D. D		Puerperal Infection.	ncep- alitis hargica. Typhus Fever.		hal	Paralysis spinal I			heria.	Dipht		Scar Fev	phoid	Typho Paraty Fey	Estimated Mean	Municipality or Shire.	
$ \begin{array}{c ccccccccccccccccccccccccccccccccccc$	D. C. D.	С. р.	С. D.	D.	C.	D.	С.	D.	С.	D.	C.	р.	C.	D.	C.	Population.	
$ \begin{array}{c ccccccccccccccccccccccccccccccccccc$									TIES.	CIPALI	Muni						
$ \begin{array}{c ccccccccccccccccccccccccccccccccccc$	1																Bowral
$ \begin{array}{c ccccccccccccccccccccccccccccccccccc$	1																
Jamberoo 970	4						1		7	1	7	•••	7	• • •		8,010	Campbelltown
$ \begin{array}{c ccccccccccccccccccccccccccccccccccc$							•••		•••	•••			1		•••		Gerringong
$ \begin{array}{c ccccccccccccccccccccccccccccccccccc$		•••				• • • •						• • •		***			
$ \begin{array}{c ccccccccccccccccccccccccccccccccccc$		•••	• • • • • •		•••	• • • •	1		•••	•••		• • •	1	•••	•••		
$\begin{array}{c ccccccccccccccccccccccccccccccccccc$				1	• • • •							•••		•••			
$ \begin{array}{c ccccccccccccccccccccccccccccccccccc$	1 41 15	1	•••	· · · · ·	• • • •	•••	3	•••	1 0	• • • •	0	•••	9	•••	•••	72,380	Wollongong, Greater
$ \begin{array}{c ccccccccccccccccccccccccccccccccccc$									•	HIRES	S						
$ \begin{array}{c ccccccccccccccccccccccccccccccccccc$	1					1										5,670	Mittagong
					***		4		2			• • • •		• • •		14,260	Shoalhaven
	1 17 10	1					2	1	19			• • • •					
.,		•••	• • • • • • • • • • • • • • • • • • • •		***	•••	• • •	1	1	•••	1	• • •	1	• • •	•••		Wingecarribee
Wolfondilly	2 4	• • • • • • • • • • • • • • • • • • • •	• • • • • • •	•••	•••		•••	•••	3	•••	1	•••	6	•••	•••	9,180	Wollondilly
Total	2 66 36	2				1	11	2	38	1	27	•••	40	•••		174,920	Total

GRAPH 3.

Pneumonia—Annual Death Rate per 100,000 of Population in New South Wales, 1875–1950.



GRAPH 4.

Influenza—Annual Death Rate per 100,000 of Population in New South Wales, 1875–1950.

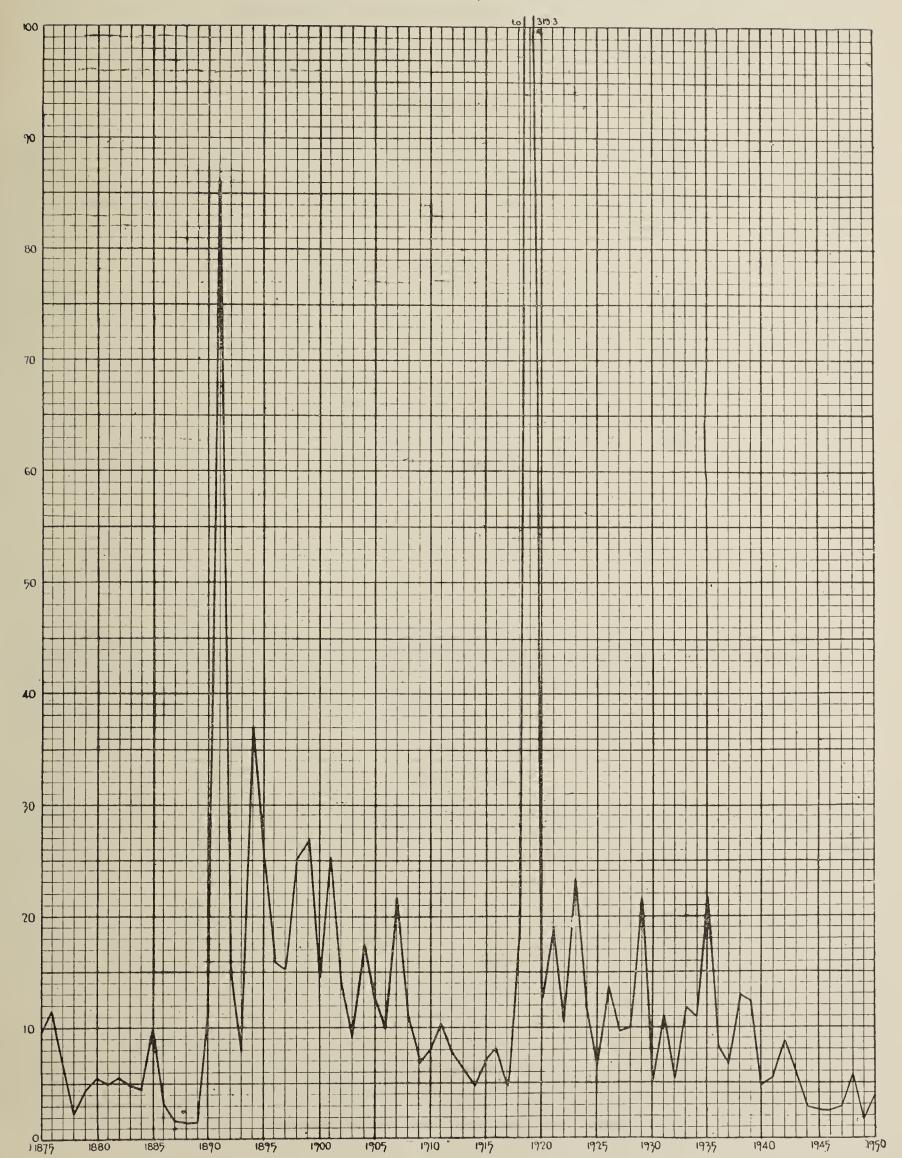


Table IV.—Notifiable Infectious Diseases—Cases and Deaths, Each Local Area in the Richmond-Tweed Health District, 1950.

Municipality or Shire.	Estimated Mean Population.	Paraty	oid and phoid yer.	Sca Fev		Dipht	heria.	Infa Para		Cere spir Meniu	ral	Enc hal Letha	itis	Tyl Fe			peral ction.	cu	ıber losis forms).
	r opanarion.	C.	D.	C.	υ.	C.	р.	C.	D.	C.	D.	c.	D.	С.	р.	C.	D.	C.	D.
						Muni	CIPALI'	TIES.											
Ballina Casino Grafton Grafton South Lismore Maclean Mullumbimby Ulmarra	3,350 $7,310$ $8,940$ $4,160$ $16,360$ $1,790$ $1,730$ $1,670$			 1 7 		3 4 4 9 1 2		1 1 					•••	1	•••			 4 2 5 	1 1 1 4
						S	HIRES.												
Byron Copmanhurst Gundurimba Harwood Kyogle Terania Tintenbar Tomki Tweed Woodburn	9,310 2,650 4,030 4,790 11,970 7,290 4,890 3,710 20,630 4,450			1 1 3 2 		 1 2 2 2 1 7	··· ·· ·· ·· ·· ·· ·· ·· ·· ·· ·· ·· ··	 1 4		···· ··· ··· ··· ··· ··· ···				1 1 6 1		 1		5 1 1 1 2 2	2 1
Total	119,030	•••		15		38	1	6		2	•••	•••		11	•••	1		23	11

Table V.—Notifiable Infectious Diseases—Cases and Deaths, Each Local Area in the Mitchell Health District, 1950.

Municipality or Shire.	Estimated Mean	Typho: Paratyj Fev	phoid	Scar Fev		Dipht	heria.	Infai Paral		Cere spin Menin	nal	Enc hali Letha	itis	Typ Fev		Puer		cu	iber- losis orms)
	Population.	C.	р.	с.	D.	C.	D.	C.	р.	C.	υ.	C.	D.	C.	D.	C.	р.	c.	D.
						Munio	CIPALIT	ries.											
Bathurst Blue Mountains Lithgow Mudgee Orange	22,440 15,390		•••	$\begin{bmatrix} 74 \\ 5 \\ 10 \\ 3 \\ 4 \end{bmatrix}$	•••	$\begin{array}{c c} 2\\1\\ \dots\\2\\ \dots\end{array}$	•••	12 6 2 2	2 1 		1	• • •		•••	•••	1	•••	$\begin{vmatrix} 7 \\ 13 \\ 4 \\ 6 \\ 9 \end{vmatrix}$	$\left \begin{array}{c}4\\15\\1\\2\\2\end{array}\right $
						Si	HIRES.												
Abercrombie Amaroo Blaxland Canobolas Cudgegong Gulgong* Lyndhurst Molong Oberon Rylstone Turon	2,340 9,720 5,760 4,390 5,760 6,340 1,750		 1 	17 \ 3 \ 2 \ 2 \ 2 \ 2 \ 2 \ 2 \ 2				4 1 3 1 1 1 2				 1 1 						1 4 1 1 2 1	2 3 1 1 1
Total	127,260	1	1	124		5	•••	36	3	3	1	2	•••		•••	1	•••	51	34

^{*} From 1st January, 1950, A Riding of Cobbora Shire was amalgamated with Gulgong Shire.

Table VI.—Notifiable Infectious Diseases—Cases and Deaths, Each Local Area in the Remainder of State, 1950.

Municipality.	Estimated Mean Population.	Typho Paraty Fev	phoid	Scar Fev		Diplit	heria.	Infa) Paral		Cere spir Menir	nal	Enc hal Letha	itis		ohus ver.	Puer Infec		cul	iber- losis forms).
	2 0 1/2	C.	D.	C.	D.	c.	D.	C.	D.	C.	D.	C.	b.	C.	D.	C.	р.	C.	D.
					7	MUNIC	TD 4 T T(D)	rnc *		·		1			<u>'</u>	1	1		
A11	1 1 500		1				(PALITI	res.				4		ı					
Albury Armidale	$15,580 \\ 8,100$		•••	$\begin{array}{c c} 25 \\ 22 \end{array}$	•••	1	•••	•••	•••		• • •		• • •	• • •	•••	1	• • •	$\begin{vmatrix} 11 \\ 3 \end{vmatrix}$	1
Balranald	1,290		•••	• • • •	•••	1		• • •	•••					• • •					•••
Barraba	1,530	•••	• • • •	•••	•••	•••	•••	1	•••	•••		• • •	•••		•••	•••	•••		
BegaBombala	3,260 1,200	•••	• • •	•••	•••	•••	•••	1	•••	•••	•••	•••	•••	• • •	•••	• • •	• • •	1	• • •
Bourke					• • •		•••	•••	•••	•••	• • •		• • •			• • •		3	1
Brewarrina	860	• • • •		•••	• • •	1	•••	· · · ·	•••									1	
Broken Hill	$\begin{array}{c c} 31,020 \\ 2,090 \end{array}$	•••	•••	7	• • •	• • •	•••	2	1	•••	* * *	•••		• • •		• • •	• • •		13
Condobolin	2,700		•••	1		•••	•••	1	1			• • •	•••	• • •	•••	• • •	•••	1 1	2
Cooma	2,630		•••		•••	• • •	•••						• • •	• • •	•••	• • •	• • •	4	1
Coonamble	2,730	•••	* • •	2	•••	6	2	4	•••	•••	•••					• • •	• • •	2	
Cootamundra Corowa	5,690 2,970	•••	•••	1	•••	•••	•••	1	• • •	•••		•••	•••	•••		•••	• • •		1
Cowra	5,740		•••	•••	• • •	ii	• • •	1	• • •		•••				•••		• • • •	2	$\frac{1}{4}$
Deniliquin	4,000	•••	•••	3	•••	•••	•••		•••	•••							• • •	ī	
Dubbo	10,310	•••	•••	•••	•••	3	•••	8	• • •	•••		•••	•••	•••	***		•••	4	•••
Dungog Forbes	$2,150 \\ 6,280$	•••	•••	5	•••	•••	•••	•••	• • •	•••	•••	•••	•••	•••	•••	• • •	• • •	$\frac{1}{3}$	2
Glen Innes	5,640		•••		• • •	•••	• • •		•••	•••	•••		•••	• • •	• • • •			1	ī
Goulburn	17,230	1	•••	3	• • •	2	•••	5	• • •	1					,	1	1	8	2
Grenfell	2,530	•••	•••	1	• • •	•••	•••	•••	•••		•••	•••	•••	• • •				1	
Gunnedah Hay	4,560 3,080	•••	•••	4	•••	•••	• • •	•••	• • •	1	•••	•••	•••	• • •	•••	•••	• • •	1	1
Inverell	6,820	•••	•••	1	• • •	• • • •	• • •	1	•••				•••			•••		i	1
Junee	4,230		•••		•••	•••	• • •	•••	•••					•••				3	
Kempsey	6,900	•••	• • •	•••	•••		•••	3	•••	•••	1			• • •			• • •	6	3
Manilla	1,880 700		•••	•••	• • •	1	•••	1	1	•••	•••	•••	•••	• • •			•••	• • •	
Moree	5,410		• • •	•••	• • •	1	• • •	2	• • •	•••			•••			• • •		8	2
Murrumburrah	2,700		•••	•••		•••	•••		•••		•••			•••				2	
Muswellbrook	$\frac{4,260}{3,560}$	• • • •	• • •	1	•••	1	•••	6	• • •	•••	•••	• • •	•••	•••	•••	•••	• • •		
Narrabri Narrandera	$\frac{3,500}{4,500}$	•••	•••	4	•••	$\frac{1}{1}$	• • •	1	• • •					•••	•••		• • •	1 1	1
Narromine	1,910				• • • •	î	• • •	$\frac{1}{4}$	• • •									î	2
Nyngan	1,930	• • • •		5	• • •	•••	•••		• • •	•••					•••			1	
Parkes Peak Hill	7,450 1,190	•••	•••	15	•••	•••	•••	3	•••	•••	•••	• • • •	•••	•••		• • •	• • •	7	• • •
Penrith	14,750	i	• • •	4		1	• • •	7	• • •	1								3	1
Port Macquarie	3,240			1		• • •	•••		•••		•••								
Queanbeyan	5,380	•••	•••	•••	•••	1	•••	6	•••		•••	•••	• • •		• • • •		•••	2	
Quirindi Seone	$2,760 \\ 2,480$	•••	•••	•••	• • •	1	•••	 1	•••	•••	1		•••	•••		•••	•••	2	i
Tamworth	12,960		• • •	11	•••	6	•••		•••			•••			• • •			$\tilde{6}$	2
Taree	6,930				• • •	•••	•••	•••	•••					• • • •					1
Temora	4,410	•••	•••	$\begin{vmatrix} 2 \\ 1 \end{vmatrix}$	• • •	•••	•••	• • •	•••	•••	•••	•••	•••	•••	•••	•••		3	•••
Tenterfield	3,180 $16,670$	•••	• • •	$\begin{vmatrix} 1\\17 \end{vmatrix}$	• • •	$\frac{\cdots}{2}$	• • •	25	•••	•••	•••	•••	• • •	•••	• • •	•••	•••	6	3
Waleha	1,580		•••		•••		•••		•••	•••					•••				
Warren	1,830	• • •	•••	•••	• • •	•••	•••	•••	•••		•••		•••		•••		1	1	
Wentworth	2,730	•••	•••	•••	• • •	•••	•••	1	•••	•••	•••	•••	•••		•••	•••	• • • •	1	1
Wileannia Windsor	820 8,890	•••	•••	1	•••	3	•••	•••	•••	1	•••						•••	$\frac{2}{3}$	4
Wingham	2,250		•••				•••		•••		•••						• • • •	3	
Yass	3,450		•••	9	•••		•••	5		•••	•••						• • •	1	
Young	4,840	•••	•••	1	•••	•••	•••	•••	•••	•••	•••	•••	•••	•••	•••	•••		•••	
Total Municipalities*	297,870	2		138	•••	44	2	90	3	4	2		•••	•••		2	1	114	54

^{*} Including Broken Hill.

Table VI.—Notifiable Infectious Diseases—Cases and Deaths, Each Local Area in the Remainder of State, 1950—continued.

Shire.	Estimated Mean	Typho Paraty Fev	phoid	Sca: Fev		Dipht	heria.	Infai Paral		Cere spir Menir	nal	Enc hali Letha	itis	Typ Fev			peral ction.		ıber- ılosis form
	Population.	С.	D.	С.	D.	С.	D.	С.	D.	С.	D.	С.	D.	С.	D.	С.	D.	С.	D
						S:	HIRES.	Υ,											
Apsley	2,070 3,100				• • •		•••	1	•••	1									
Ashford Barraba	1,660							1	•••							• • • •		1	
Baulkham Hills	13,320	•••		4		2			•••	1				1				6	
Bellingen	6,770	•••		•••	•••		•••	•••	•••	• • • •	• • •	•••	•••	• • • •			• • •	•••	
Berrigan	5,170	•••	•••	•••	•••	• • • •	•••	•••	•••	• • • •	• • •	•••	•••			•••	•••	2	
Bibbenluke Bingara	$2,360 \\ 2,940$			•••	•••	•••	•••	2	•••	1	•••	•••	•••			•••	•••	•••	••
Blacktown	28,170			2		3	1	$\frac{1}{4}$	•••			•••	•••	1				22	'
Bland	8,780						1	1	•••	1	1		•••						
Bogan	1,480				•••	2		1											
Boolooroo	3,170	•••			•••	• • • •	•••			•••	•••	• • •	•••		•••	•••	•••		
Boomi Boorowa	2,980 3,440	•••		•••	•••	•••	•••	$\frac{2}{2}$	1		•••	•••	•••		•••		•••	1	
Boree	6,430			1				1										1 1	
Burrangong	4,750							ī	•••		•••								
Carrathool	4,380			1				1	•••		• • •							3	
Cockburn	4,930	1	•••	1	•••	3	•••	1	•••	1							•••		
Colo	5,240 990		• • • •	•••	•••		•••	1	•••	1	1	•••					•••	1	
Coolah	2,080								•••				•••						::
Coolamon	5,140				•••			1		1	1							1	
Coonabarabran	6,960	•••		2			•••		•••		• • •							5	
oreen	2,630	•••	• • • •		•••		•••	$\frac{1}{2}$	•••	•••	•••					•••	•••	• • • •	
rookwellulcairn	5,920 4,790	i	1	$\begin{array}{c c} & 1 \\ & 13 \end{array}$	•••	•••	•••	$\begin{bmatrix} 2\\2 \end{bmatrix}$	•••	• • • • • • • • • • • • • • • • • • • •	•••	•••	• • •	• • • •		•••	•••	7	
ulcairn emondrille	$\frac{4,790}{2,550}$			10	•••		• • • •	ث ا	• • •		• • • •		• • • •				•••	1	
Oorrigo	14,110					3		1	1	1								2	•
Oumaresq	3,980			6			•••		• • •										
Eurobodalla	5,830				•••	•••	•••	5	•••	• • • •	•••	• • • •	•••	•••	• • • •	•••		1	
Hilgandra	4,430 4,580	• • • • • • • • • • • • • • • • • • • •	•••	•••	•••	2	•••	• • • •	•••	•••	•••	•••	• • • •				•••	1	
Houcester	6,720		•••	76			•••	3	•••							•••	•••	2	
Goodradigbce	3,460			•••			• • •	ì	• • •								• • • •		
Sosford	22,350			2	•••		•••	5	1									8	
undagai	4,850		•••	•••	•••	•••	•••	14	1		•••		• • •					2	
dunning	2,470	1	•••	•••	•••	•••	•••	•••	•••	• • • •	•••		• • • •	• • • •	• • • •	•••	•••	1	
luyra	6,010 $10,150$	1	i	•••	•••		•••	•••	•••	•••	•••	•••	•••	•••	***		•••	1	
Holbrook	2,370		•••	• • • • • • • • • • • • • • • • • • • •			•••	1	•••					•••					
Hume	4,780			12		21	2		•••	1	1						•••	•••	
llabo	2,160			•••	•••	•••	•••	1	•••	•••	•••	•••	•••	•••	• • • •			• • • •	
mlay	5,020	•••	•••		•••	•••	•••	1	1	•••	•••	•••	•••	• • •	•••	•••		•••	•
emalong erilderie	3,480 1,550		•••	1			•••	•••	•••		•••	•••		•••		•••	•••	•••	
indalee	2,300		•••	•••	•••		•••	•••	•••								i		
Yeamba	5,870			6	•••	7		15	1	•••	• • • •	•••	•••	•••					
achlan	5,250		•••	1	•••	•••	•••	1	•••	•••	•••			•••		•••		•••	
eetoniverpool Plains	9,660 4,340	•••	•••	$\frac{5}{2}$	•••	•••	•••	•••	•••	•••	•••	•••	•••	•••	•••	•••	•••	5	
iverpool Plains	4,340		•••	$\frac{2}{2}$	•••		1	6	•••		•••	•••	•••	•••		•••	•••	1	
Iacintyre	4,160					1		2										1	
Lacleay	9,020			•••				1	•••							•••		1	
landowa	1,390	•••	•••	•••	•••		•••	1	•••	•••			• • • •		• • • • • • • • • • • • • • • • • • • •			• • • •	
fanning	14,190	•••	•••	•••	•••	•••	•••	1	•••		1		•••		•••			1	
[arthaguy Ierriwa	2,120 $2,540$	•••	•••	•••	•••	•••	•••	•••	•••	1	1	•••	•••	•••	•••	•••	•••	•••	
litchell		•••	•••	•••	•••	i	•••	5	•••				•••		•••	•••			
Ionaro	2,310			$\frac{1}{2}$			•••		•••										
Iulwaree	5,900	•••		1	1	•••	•••		•••	•••								2	
Iumbulla	4,270	•••	•••	1	•••	•••	•••	2	•••	•••	•••	•••	•••		•••			1	
Iurray Iurrumbidgce	2,010 660	•••	•••	•••	•••	•••	•••	•••	•••	•••	•••	•••	•••	•••			• • • •	1	'
Turrumbiagee	2,910			•••	• • • •				•••			•••							l :
Iuswellbrook	3,740			•••	•••													2	
Vambucca	9,160	•••		1	•••	3		1	•••				•••					1	
Iamoi	8,160			1		1		2	• • •								k	3	

Table VI.—Notifiable Infectious Diseases—Cases and Deaths, Each Local Area in the Remainder of State, 1950—continued.

Shire.	Estimated Mean Population.	Typho Paraty Fev	phoid	Sca: Fev		Diphtl	he ria.	Infai Paral		Cere spin Menin	nal	Enc hali Letha	itis	Typ Fev		Puer Infec		cul	ber- osis orms),
	1 opulation.	С.	D.	C.	D.	С.	D.	С.	D.	с.	D.	С.	D.	С.	D.	С.	D.	C.	D.
	I	1	<u> </u>		<u>.</u>	SHIRES:	-conti	inued.		<u> </u>									
Narraburra	3,270		1					2			1	1	t	1	ı	ı	ı	ı	1
Nundle	1,410		•••		•••	1	1		1		•••		• • • •	• • •		• • •	• • •	1	
Nymboida Orara	$\begin{array}{c c} 2,340 \\ 1,570 \end{array}$		•••	•••	•••	•••	•••	•••	•••	•••	•••		• • •	• • •		• • •	* * * *	1	• • •
Patrick Plains	5,510		• • •	2	•••	• • •	•••	1		1				• • •				1	• • •
Peel	6,440 4,980	•••	• • •	•••	•••	3	•••	• • • •	•••		•••		•••	•••	•••	• • •	• • • •		• • •
Severn Snowy River	3,630		• • • •	1			•••		•••				•••	•••		• • •	•••		•••
Stroud	6,870	• • •		5	•••	1	•••	12	2		• • • •		•••	•••		***			
Talbragar Tallaganda	$3,370 \\ 2,950$	•••	•••	•••	•••		•••	1	•••	1	•••	•••	•••	• • • •	•••		• • • •	1	•••
Tamarang	2,460		•••									• • •	•••	• • • •	• • •	•••	•••		i
Tenterfield	4,570	•••		6	•••	•••			•••					•••	•••	•••	• • • •	•••	
Timbrebongie Tumbarumba	3,330 3,430			4	•••	$\begin{array}{ c c } & \cdots \\ & 2 \end{array}$	•••	$\begin{vmatrix} 3 \\ 1 \end{vmatrix}$		•••		•••		•••	•••		•••	• • •	$\frac{2}{1}$
Tumut	9,200		•••	•••	•••	ī	***	4										5	ī
Upper Hunter Uralla	5,010 4,680	•••	• • • •	5	***	•••	•••	$\begin{array}{c} 1 \\ 1 \end{array}$	•••	1 1	1		•••	•••	•••	• • •	• • •	•••	•••
Urana	2,490	• • •	• • •		•••	•••	• • •		•••							•••	• • • •		• • •
Wade	12,040	•••	•••	6	•••	3	***	5	2			•••		•••		•••	• • • •	2	3
Wakool Walgett	$3,500 \\ 3,470$				•••		1	1	•••	$\begin{vmatrix} 1\\2 \end{vmatrix}$						•••	• • •	$\begin{vmatrix} 1 \\ 1 \end{vmatrix}$	1
Wallarobba	4,330						•••	$\frac{1}{2}$										î	1
Waradgery	$\frac{600}{7,120}$	•••	•••		•••	•••		3		•••	•••		•••	•••			• • • •		• • •
Waugoola Weddin	$\frac{7,120}{3,110}$		• • • •	•••	• • • •	$\frac{\cdots}{2}$	1	3	1	•••	•••		•••			1	• • •	$\begin{vmatrix} 2 \\ \dots \end{vmatrix}$	
Wellington*	10,700	•••	•••	2		5	4	9	1		•••			•••			•••	4	2
Windouran Wingadee	$\frac{480}{3,040}$	•••	•••	•••	•••	1	•••	•••	•••	•••	•••		•••	• • •			•••	• • • •	
Wyong	12,010		•••	2	•••		•••	4	•••				• • •			•••		3	1
Yallaroi	3,830		•••	• • • •	• • • •	•••	•••		•••		•••		•••	•••				1	
Yanko Yarrowlumla	$3,450 \\ 3,170$	•••		•••	•••	1			•••				•••	•••				1	
	506,460	3	$-\frac{1}{2}$	177	1	69	8	145	13	16	7		-	2		1		106	40
Total, Shires	900,400	3	ئد	177	1	08	0	140	10	10	10 1	1		2		1	1	100	40
		W	ะสารา	a Drvr	STON (Uninc	OPPOP	(GSTA	Porre	ne Drs	TP TOT	z.							
						e Distr		•					show	m.)					
Euabalong	†						•••	1	1										1
Goodooga	†			3	•••		•••	•••	•••	•••			•••		•••	•••	•••		•••
Walgett	†		***	•••	•••	1	• • •	3	•••	•••	•••			•••	•••		•••	•••	•••
Total, Unincorporated	14,720	l	•••	3	•••	1	•••	4	1	١	,	•••		• • • • • • • • • • • • • • • • • • • •	•••				1
					:	Miscei	LLANE	ous.											
Lord Howe Island	202		•••		• • •		•••				1						•••] [
Migratory	7,390		•••	•••	•••	•••	•••	•••	•••	•••	•••			•••	•••				
Outside the State— Australian Capital																			
Territory				• • •	• • •		•••	1	• • •	•••	•••				•••			1	
Queensland	•••	•••		•••	•••		•••	•••	•••	•••	•••		•••	•••	•••	• • • •	•••	1	•••
Victoria South Australia	•••		• • •	• • •		•••	•••	• • •	• • •		•••			•••		• • •	•••	• • •	• • •
																		${2}$	
Total, Miscellaneous	7,592							1	***						•••	•••			
Total, New South Walcs	3,224,892	16	4	1,052	1	390	24	789	55	98	21	2		21	•••	14	9	1787	671

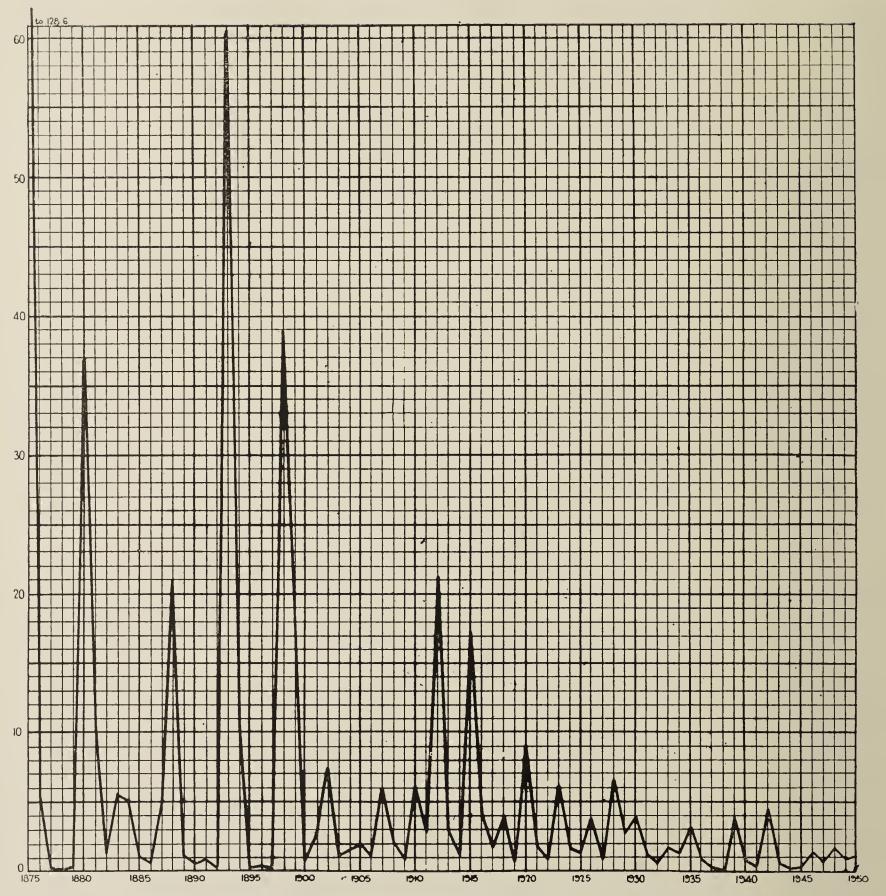
Total, New South Wales—Undulant Fever—1 case; Deaths, Nil.

^{*} From 1st January, 1950, the former Wellington Municipality, Macquarie Shire and B and C Riding, of Cobbora Shire were amalgamated to form Wellington Shire.

[†] Not available.

GRAPH 5.

Measles—Annual Death Rate per 100,000 of Population in New South Wales, 1875-1950.



1950	
C	
+	
Ŀ	
V.	
Ë	
٠,	
<u>=</u>	
2	
Ħ	
_	
<u> </u>	
α (+)	
ç	
A	
-Cases and Deaths by Sex and Age Bach Health District.	
n O	
c	
1	
75	
20	
غے	
ď	
Ğ	
_	
'n	
2	
Ø.	
Ž.	
ت	
Š	
S	
Š	
<u>–</u>	
ŝ	
5	
3	
able Infectious Diseases-	
ø	
Q	
fia	
-	
-Notifial	
T	
1	
VII.	
-	
E	
BI	
I'A	
-	

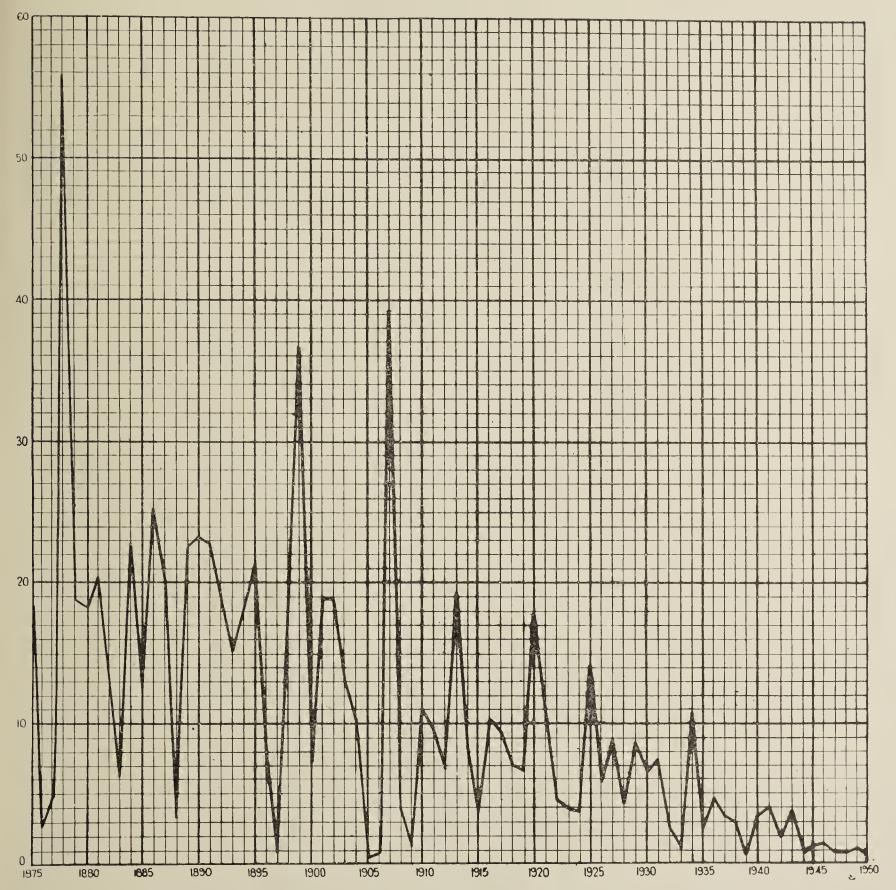
Publish Publ				۱ -	110700011748 :		_	: ::ພນວ4ເວລ :			1			1
Part		ths.								-			_	
Participation Participatio	osis ns).	Dea				٠		: : : : : : : : : : : : : : : : : : :						
Participation Participatio	erculc Il fori		1 .		1		_			_			_	
Participation Participatio	Tub (a)	es.					_			_			_	
Particular Par		Cas		1			_	1					_	
Participation Participatio		1 10	X		1		_	<u> </u>		_			_	
Participation Participatio	rpera		<u>F</u>	_			_			G1	: : : : : : : : : : : : : : : : : : :		:	
Part	Puel	Cases.	F.	6			:			:			_	:::=:::::::::::::::::::::::::::::::::::
Participation Participatio			i.	\exists			:			:			:	
Particular Par	ever.	Deat]		_			<u>:</u>			:				
Particular Par	hus F		1 .		1					-				: : :লগগেকানন :
Purpholishing Purpholishin	Typ]	ases.		-	i i		<u>:</u>							: : : :c1 : : : :
Cases Deaths Case		1	K	_	:::::::::::::::::::::::::::::::::::::::			::::=:=:::		:			_	: : : : : : - 4 : - :
Participation Participatio	sa .	ths.	<u> </u>	:			_	<u> </u>		:				
Participated National Procession Participation Participa	haliti rgiea.	Dea		:				i		:				
Participated National Procession Participation Participa	Incep Letha	တို့	Ţ.	<u>:</u>	; ; ; ; ; ; ; ; ; ; ; ; ; ; ; ; ; ; ;		<u>:</u>			:	:::::::::::::::::::::::::::::::::::::::		:	
Caretoropinal Neingridge Part P	HH	Case					:			:			:	
Particle			1 .		0101 [: :0101 : :		1	: : : : : : : : : : : : : : : : : : :		1			:	
Carteland Particle Particle Particle	ngitis.	aths.		61			-	1		1	: : : : : : : : : : : : : : : : : : : :		:	
Carteland Particle Particle Particle	Menir	Dea		CT.	⊢oj	H.			Ę	:		THE	:	
Cartier Deaths Cases Ca			1 .		45001114:1:	ISTRIC	-	m e1 e1 : : : : : : : : : : : : : : : : :		11	нфю :н : : : :		C1	[c1 : : : : : : : :
Cartier Deaths Cases Ca	ebrosj	ses.			\$\phi \text{continuity} : : :	TH D	7	m : i : : : : : :	rh Di	ಣ	:o1 ← : : : : : : :	ALTH	¢1	c1
Cases. Deaths. De	Cer	్ చ		HEA1	87.41 : :01 :11 :	HEAL	∾ —		HEAL	8	니 4-c1 : 니 : : : : : :	H	:	
Cases Deaths Cases				LTAN 20	:01 4 H :01 : : :			ic1 12 4		¢1	:::::::	TWBE	:	
Cases. Deaths. Cases. Cases. Cases. Deaths. Cases. Cases.<	sis.	eaths.	<u>F</u>	ROPOL	:::::::::::::::::::::::::::::::::::::::			[-roc1 : : : : :		1	:::-::::	OMD-	:	
Cases. Deaths. Cases. Deaths. Cases. Deaths. Cases. Infantile and the control of the cont	araly	Ã	M.	METI 16	:01 4 ∞ ≒	HUNT	13	[-aa : : : : : :	Sou	1	: : : : = : : : :	RICHIN	:	:::::::::::
Caeca. Deaths. Cases.	ıtile I		Ţ.	385	101 170 170 170 170 170 170 170 170 170			1330		38	1 : : : : : : : : : : : : : : : : : : :		9	: :ro : : : : : :
Cases. Deaths. Cases. Deaths. Deaths	Infa	Jases.	E.		8652 6672 6672 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1		10+	20 13 13 13 13 13 13 13 13 13 13 13 13 13		17	:4∞01∞ : : : :		က	:::::::::::::::::::::::::::::::::::::::
Cases. Deaths. Cases. Deaths. Deaths			M.		60 108 40 14 14 11 11 11		44	110 119 119 119 119 119		21	a4∞4a :⊔ : : :		ಣ	: :c1 : : : : : :
Partyphoid and Fever. Cases. Deaths. Cases. Cases. Cases. Deaths. Cases. Cases		ró.	Ţ.	6	w.ro : : : : : : : : : : : : : : : : : : :		ಣ	:-01 ::::::::		-	:- : : : : : : :			
Partyphoid and Fever. Cases. Deaths. Cases. Cases. Cases. Deaths. Cases. Cases	نه	eath	E	10	:01 m		<u>~</u>	:::::::		:	<u> </u>			::::=::::::::::::::::::::::::::::::::::
Cases. Deaths. D	theria		M.		01 : : : : : :			::-::::::::::::::::::::::::::::::::::::		-	: - ::::::::		:	
Cases. Deaths. Cases. Deaths. Cases. Deaths. Cases. Deaths. Cases. Deaths. Cases. Deaths. Cases. Deaths. Cases. Deaths. Cases. Deaths. Cases. Deaths. Cases. Deaths. Cases. Ca	Diph		T.	162	2008 447 11		44	01000011 : :m		22	010H448 : : : :		38	6100141 : : : : : : : : : : : : : : : : : :
Cases. Deaths. Cases. Deaths. Cases. Deaths. Cases. Deaths. M. F. T. M. F. T. M. F. T. M. F. T. M. F. T. M. F. T. M. F. T. M. F. T. M. F. T. M. F. T. M. F. T. M. F. T. M. F. T. M. F. T. M. F. T. M. F. T. M. F. T. M. F. T. M. F. T. M. F. T. M. F. T. M. F. T. M. F. T. M. F. T. M. F. T. M. F. T. M. F. T. M. F. T. M. F. T. M. F. T. M. F. T. M. F. T. M. F. T. M. F. T. M. F. T. M. F. T. M. F. T. M. F. T. M. F. T. M. F. T. M. F. T. M. F. T. M. F. T. M. F. T. M. F. T. M. F. T. M. F. T. M. F. T. M. F. T. M. F. T. M. F. T. M. F. T. M. F. T. M. F. T. M. F. T. M. F. T. M		Cases	- E	16	o 다 및 파 파 e i 는 i : :		61 —	:0:0:0:0:1		15	0180HH01 ::::		07	::1 4 cc - : : : : : :
Cases. Deaths. Cases. Deathr. Searlet Fever. Cases. Deathr. T. M. F. T. M.			M.	17	41618 : : : : : : : : : : : : : : : : : : :		20	0.4.0 : : 1 : : : : : : : : : : : : : : : :		12			18	9224 : : : : : : : : : : : : : : : : : :
Cases. Deaths. Cases. Cases. Deaths. Cases. Cases. Deaths. Cases. Cas		ths.	·	:						:			:	
Cases. Deaths. Cases. Ca	ever.	Dea		<u>:</u>						:			:	
Cases. Deaths. Cases. Ca	let F		T.	505	T								15	
Cases. Deaths. Cases. Deaths.	Sear	ases.	뇬		1		29	133		61	C1 C0 # : : : : :		6	:wro : : : : : : : : : : : : : : : : : :
Cases. Deaths. Cases. Deaths. Typhoid and Fever. Typhoid Fever. Typhoid Fever. Typhoid Fever. Typhoid Fever. Typhoid and Fever. Typhoid Fever. Ty			M.		93 1114 12 12 1 1 1 1		24	11.00		18	: 10000001 : : : : : :		9	401 : : : : :
Cases. Dea Cases. Dea Dea Little Cases. Dea	er.	hs.			38 yes	,				\vdots			:	<u>:::::::::::::::::::::::::::::::::::::</u>
Cases Cases	l and d Fev	Deat		:						:			1	
Cases Cases	phoid phoid				nale 3					1			1	
	Ty	Cases.	=	1			44			:			:	:::::::::
Age Group. All ages Under 1 years 15-24 15-24 15-24 25-34 35-44 45-54 55-64 Conder 1 year Under 1 year Under 1 year Under 1 year Under 1 year 1-4 years 35-44 15-24 15-24 15-24 25-34 25-34 25-34 25-44 25-44 35-44	4		W.	<u>.</u>	F CVer		:			:			:	<u> </u>
Age Grown and ages Under 1 ye		.dn			ar dove			ar d ove		•	ar d ove			ar ove
All ag Vot		e Gro			rayers "" "" "" "" "" "" "" "" "" "" "" "" ""		es S	rars "" "" "" "" "" "" "" "" "" "" "" "" ""		es	rears " " " " " " " " " " " " " " " " " " "		es	years ''' ''' ''' ''' ''' ''' ''' ''' ''' '
A MOTORINAL A MOTORINAL A MOTORINAL A MOTORINAL		Ag		III age	Under 11-14y 15-24 15-34 15-54 15-54 15-54 15-54 15-54 15-54		Ill ag	Under 1-14 y 5-14 5-24 55-34 55-34 55-54 55-64 55-64 70t st		All ag	Under 1-4 y 5-14 y 15-24 15-24 15-34 15-54 15-54 15-54 15-54 15-54 15-54		Allag	Unde 1-4 15-24 15-24 35-44 45-54 55-64 55yes
				শ্	P		₹Q.	— □ □ □ □ □ □ □ □ □ □ □ □ □ □ □ □ □ □ □		-4			7	The state of the s

TABLE VII.—Notifiable Infectious Diseases—Cases and Deaths by Sex and Age, Each Health District, 1950—continued.

	1	T.	34	},	H ::::0101~1~0		13	:::-:: ::::-:	61 80		::::::::::::::::::::::::::::::::::::::	671	10 10 10 118 110 1110 1144 1166 1137
	ths.		~ ~ %	+			1		30 - 8	-	::0100000400:	87 67	c1c1 to 1 to 2 to 2 to 2 to 2 to 2 to 2 to
sis s).	Deaths	FI	_	1			_		-				
Tuberculosis (all forms).		M.	97	\pm			11	: : : : : ল কা কা জ :	- 27.	-	::14000044	7 484	1121 1121 1121 1121 1121 1121 1131 1131
uber (all i		H	51		14600464 :		18	: ::(१८)चाचाचादा	666		:004724949 :	1,787	912323232 2123232 212323 160 160 160
H	Cases.	<u>~</u>	19	-	:- :4r-20-20 : :		5	::::c1c1:::::	7.6		: 574.5957: 1:	657	1011148 1011148 10148 10148 10148 10148 10148 10148 10148 10148 10148 10148 101
	၁	M.	35	1	ল : c1c1ত।∽লেশ্শ :		13	: : : : : : : : : : : : : : : : : : :	1146 1		: 1880484315:	1130 6	4.00 11111 1.00 1.00 1.00 1.00 1.00 1.00
= :	ls.			1					6	- 1	: : : : : : : : : : : : : : : : : : :	9 1	: : : : : : : : : : : : : : : : : : :
Puerperal Infection.	Dths	Fi	:				-			1		_	
Puer	Cases.	Ħ	1		::::-::::::::::::::::::::::::::::::::::		: }		¢r.	٦	: : : : : : : : : : : : : : : : : : :	7	::::-ro :::::e1
			-	<u> </u>			:	:::::::::::::::::::::::::::::::::::::::	_	:		:	
er.	Deaths	Ē	:							:		:	:::::::::::::::::::::::::::::::::::::::
Typhus Fever	Ă	M.	:		::::::::::		:	:::::::::::::::::::::::::::::::::::::::	_	:	<u>:::::::::</u> :	<u>:</u>	
snyd	vå	Ţ	_:	:	<u>:::::::::::::::::::::::::::::::::::::</u>		:	<u>:::::::::::::::::::::::::::::::::::::</u>	¢	1	: : : - : - : : : :	21	:::::::::::::::::::::::::::::::::::::::
Ty	Cases.	<u> </u>	_:	:	<u>::::::::::</u> :		:	<u>:::::::::::::::::::::::::::::::::::::</u>	-		<u> </u>	9 - 9	: : : : : : : : : : : : : : : : : : :
	1			<u>: </u>	<u> </u>		:		_		<u>: : : - : : : : : : : : : : : : : : : :</u>	. 15	:::014010HH:
	ths.	T_		<u>: </u> -			:		_	: :		:	
alitis gica.	Deaths	M. F		: :					_	:		:	
Encephalitis Lethargica.		l Ei		1			:		-	:		61	:::::::
En	Cases.	E		1			:		-	:		c1	::::::::
	ő	M.		:			:		_	:	:::::::::::::::::::::::::::::::::::::::	:	<u> : : : : : : : : : : : : : : : : : : :</u>
, rê		H	-	۱ ا	::::::::::::::::::::::::::::::::::::::		:			ا ت		21	wrog⊢ : :4ww :
Meningitis.	Deaths.	<u>F4</u>	-	٦	:::::::::::::::::::::::::::::::::::::::		:		9	n	- :- : : : : : : : : : : : : : : : : :	1~	c1 : : : : : : : : : : : : :
Meni	De	M.	-	:			:		•	o	: m - : : : : :		H70H : : :40 : :
pinal		· ·	_	-	<u> </u>		:	<u>. </u>	-	02	কাতকোল :আনল :	1 86	
	se se		DISTRICT.	1		CI.							012200000000000000000000000000000000000
Cerebros	Cases.	<u>F</u>				DISTRICT	:		∞ -		• • • •	ATE.	
-		M.	ттн г	_			:		0	<u>ာ </u>		E. STA	1
1	200	H.	НЕАГТН	ا ،	:: -c1 ::::::	HILL		:- : : : : : : :	Z .	16	0101001001	ног 55	4 :01 : : :
sis	Deaths.	E	ELL	:	::::::::::	BROKEN	:			ပ္	: : c1 44 : : : : : :	W 19	100 :::::::::::::::::::::::::::::::::::
Infantile Paralysis	A	M.	MITCHELL	0	: : c1 : : : : : :	BR	-	:- : : : : : : :	(10	cici—cod : : : : :	36	619861 4 :
ile P		H	M - 36	00	:,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,		c1 	::::::::		238 885 287	250 60 60 60 11 11 12 12 13 13 13 13 13 13 13 13 13 13 13 14 14 14 15 15 16 16 16 16 16 16 16 16 16 16 16 16 16	1 6821	164 1233 1233 1233 1333 1333 1333 1333 133
ıfant	ses.		- 61	21	: : : : : : : : : : : : : : : : : : :			<u>'</u> : :		99 27	.: 113 133 133 133 133 133 133 133 133 133	319 17	
1 4	Cases.		-					1	-	!	1002332	-	
	1		, c	51 -			_	1	_	146		1470	
1	**************************************	i H	-	:			:		,	10		6 -	250:::::
	Deaths	1					:		4	ಣ	:::::::	11	:40 H : : : :
heria		M.		:			:	: : : : : : : : :	I	-1	Lo : : : : : : :	53	c1∞ ⇔ : : : : : :
Diphtheria		H	1.5	o l	: : : : :-		:	::::::::::		114	addanae :	1390	111 111 111 111 111 111 111 111 111 11
A	Cases.	Fi	¢		::::::		:			67 1	80 # 8 H 8 G I H : :	81 026	
	Ca		- c	51	:		:			1~			
	1		-	:			_	1	-	1 4		1.170	
	Deaths.	F. T		:			:	<u> </u>		_		-	
ever.	Dea	N. N.	-	:			<u>:</u>	1 : : : : : : : : :		_ :		-	7
et F		l Fi		42	1 0 0 0 0 0 0 1 1 1 1 H		1	[:কংগ :ল : : : : :		311	4 + 111 1555 100 100 100 100	11059	
Scarlet Fever	Cases.			ان 	c16144 c1 : : : : : : : : : : : : : : : : : :		4	[c1c1 : : : : : :					1
32	Ca	<u> </u>		_	1		-			7 174	1	- - - - - - - - - - - - - - - - - - -	# # # # # ~ ~ ~ ~ ~ ~ ~ ~ ~ ~
	1	- N			1 : : : : : : : : : : : : : : : : : :		_	:c1 : : : : : : : :		1137	24 th 20 cm 1 : 1 : 1 cm	7	177 177 24 254 254 254 254 254 254 254 254 254
l ver.	Deaths.	T.	-	1 			:			- 61	<u> </u>	- 6	1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1
Typhoid and Paratyphoid Fever	Dea	M. F		:			<u>:</u> :	<u> </u>				- 6	1 : :c1 : : : : : : : : : : : : : : : :
ohoic		H	-	=	: : : - : : : : :		<u>:</u> :	1		<u></u>	: : : : : : : : : : : : : : : : : : :	-	<u> </u>
Tyl	Cases.	Ē	Par I	:			<u>:</u>						
Pa	C	M.		_	1:::-:::			1		4	1 : :0 : :- : : :	;	ever-
	ċ			:	Under I year 1-4 years 5-14 ,, 15-24 ,, 25-34 ,, 35-44 ,, 45-54 ,, 55-64 ,, 55-64 ,, Not stated		<u></u>	Under 1 year 1-4 years 5-14 15-24 25-34 35-44 35-64 , 65-64 Not stated	•		Under 1 year 1-4 years 5-14 25-24 25-34 45-54 55-64 65 years and over Not stated		Under 1 year 2 1 1-4 years 2 1 15-24 2 2 2 25-34 1 1 1 25-65
	Age Group.			:	Inder 1 year			year			year ss		year
	ge G				Under 1 years 5-14 5-14 25-34 25-34 45-54 65-64			er 1 , vear , , 44 , , 44 , , 44 , , 41 , 41		ges .	Under 1 year 1-4 years 5-14 15-24 25-34 25-44 45-54 55-64 65 years and Not stated		er 1. year 4 ,,, 4 ,,, 4 ,,, ears ears
1	4		1	All ages	Und 1-4 5-1 5-1 25-3 35-4 455-5 55-6 65 ye		All ages	Und 1-4 15-2 15-2 25-3 35-4 45-5 65 ye		All ages	Und 15-2 15-2 35-3 55-6 65 ye Not	A 11 o	Under 1 1-4 yea 5-14 15-24 25-34 35-44 45-54 55-64 Vot stat

GRAPH 6.

Whooping Cough—Annual Death Rate per 100,000 of the Population in New South Wales, 1875-1950.



From 1950 all death rates are compiled according to the VIth International classification.

TABLE VIII.—Notifiable Infectious Diseases—Cases and Deaths by Month in Each Health District, 1950.

Month.	Parat	oid and yphoid ver.		rlet ver.	Dipht	heria.		ntile lysis.	spi	ebro- inal ngitis.		ohalitis argica.		phus ver.	Puer Infed	peral ction.		rculosis Orms).
	C.	р.	C.	Ъ.	С.	p.	C.	D.	С.	p.	C.	D.	C.	p.	C.	D.	C.	D.
					Metr	OPOLIT	AN H	EALTH	DISTR	ICT.								
January February March April May June July August September October November December	 1 3 1		33 37 32 58 40 48 42 47 40 34 55 36		5 14 11 24 18 8 11 9 14 18 17 13	2 1 2 2 2 2	43 31 24 32 33 15 14 23 38 23 41 68	1 2 1 1 1 3 4 2	1 3 2 3 5 4 10 14 6 1 2 4	1 1 3 1 1 1 1			1 1 1 2 1 1		2 3 1 3 	1 1 2 		49 32 36 26 38 37 59 47 37 34 27 22
Total	6	1	502	IIndv	162 lant F	9 over-	385	Δηση	55 et : de	othe	 	1	6	•••	9	4	1,285	444
				Onat	name r	ever	-1 case	, Augu	ist; de	auns, i	1111.							
					Hunti	er Riv	ER H	EALTH	DISTE	RICT.								
January February March April May June July August September October November December	 1 1 2		3 8 1 2 4 3 14 3 10 4 1		6 3 7 2 8 4 5 1 4 2 2	1	 2 2 1 2 1 6 37 33		3 1 1	1			 1 1 			 1 		3 7 6 1 4 2 2 5 5 7 4 5
Total	4		$\left \frac{}{53} \right $		44	3	84	$\left \right $	${7}$	1			2	•••		 1	${122}$	
						i Coas	ST HEA	ALTH]	Distri	CT.	4					,		. 4
January February March April May June July August September October November December			3 4 4 5 1 3 4 5 2 3 3		1 1 2 6 4 3 3 3 1 1	 1 	4 7 1 4 3 2 4 5 3 2 3	 1 1 	1 1 1 1 1 2 3	 1						1		3
Total	•••	•••	40	•••	27	1	38	2^{-1}	11	1	'	'	***	••• '		2	66	36
				R	ICHMO]	nd-Tw	EED H	IEALTI	a Dist	RICT.								
January February March April May June July August September October November December			 3 2 1 1 3 1 		1 1 5 6 3 7 6 5 3 1		 1 2 3						1 1 3 1 1 2 2		 1 			1 1 3 2 1 1 1 1
					38		6						$-\frac{1}{11}$				$\left - {23} \right $	11

Table VIII.—Notifiable Infectious Diseases—Cases and Deaths by Month in Each Health District, 1950—continued.

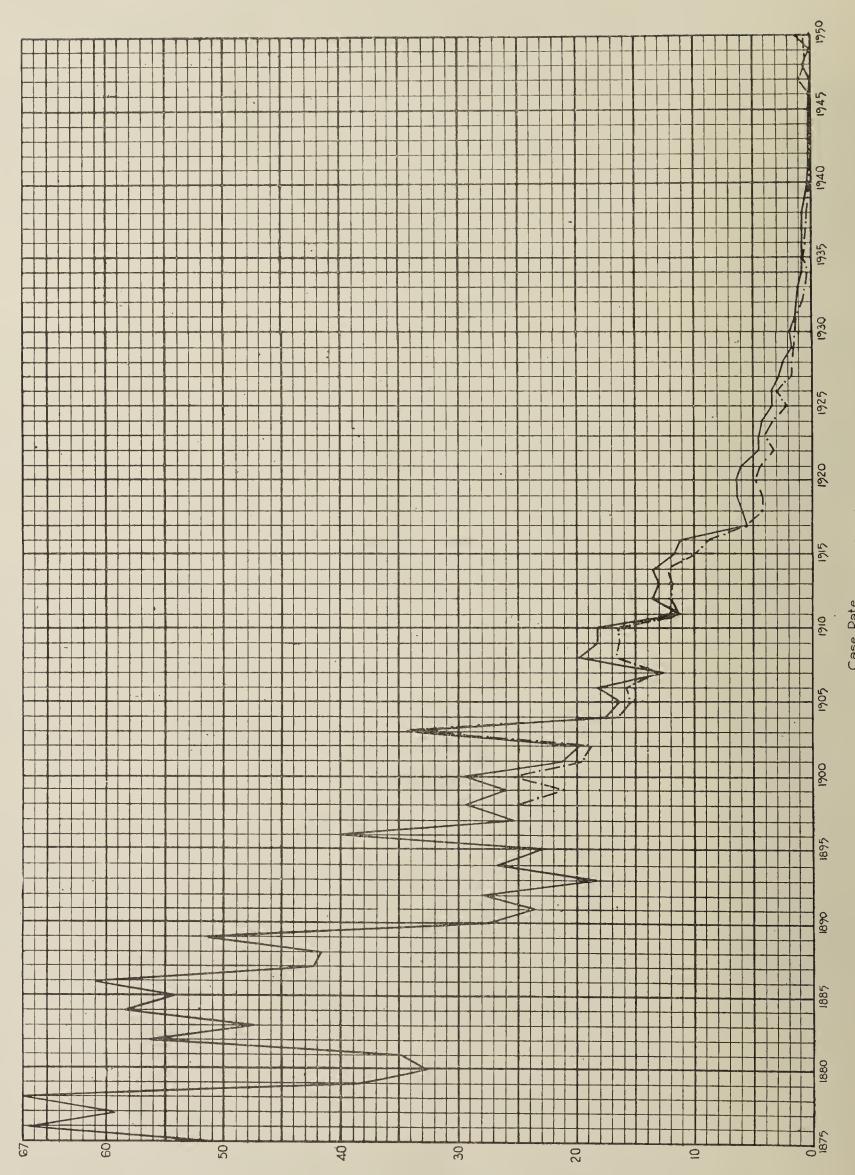
February	Month.	Typho Paraty Fev	phoid	Scar Fev		Diphtl	neria.	Infar Paral		Cerel spir Menin	ıal	Enceph Lethar		Typ Fev	hus er.	Puerj Infec	peral tion.		culosis orms).
January		C.	D.	С.	D.	С.	D.	С.	D.	С.	D.	с.	D,	C.	D.	c.	D.	C.	D.
January			,	•		Міт	CHELL	HEAL	TH DI	STRICT	•	<u></u>				<u>·</u>		<u> </u>	
March				1 1			1	2					•••	•••	•••				3
April													1	ĺ					
June	April	•••	•••		•••		•••		l		•••	1		• • •		_			3
August	June	į.		3		1		4				1							
September	· ·									i i				1					
November	September		1	2				•••	• • •			1	1						2
December	November			1															
September Sept				53	•••			6	1	••••	•••								
January	Total	1	1	124	•••	5		36	3	3	1	2	•••		•••	1	•••	51	34
February						В	ROKEN	HILL	Dist	RICT.									
March	January February												1					ļ	_
May	March			ł l				1											1
July	36												-						
August			1	1 1				1		i			1					l	
October	August																	}	1
November	September															,			
Total	November		•••	1	•••	•••	• • •	•••	•••		•••	•••			•••	•••	•••		• • •
Remainder of State. January 2																			
January 2	Total	•••		7 '	•••	•••	•••	1 2	1	•••	•••	•••	1	•••	•••	•••	•••	18	13
February	Tonnowy	i 9	ı 1	1 95 1							ı	1 .			ı	1		1	1 0
April	February	1		11		2	•••	14	1	1	1					i			10
$\begin{array}{c ccccccccccccccccccccccccccccccccccc$				1															
July 24 14 3 8 1 2 10 August 17 1 6 9 1 2 1 4 September 1 9 9 1 13 8 October 18	<u>M</u> ay			46		12	•••	17	1	2						1		1	4
August 17 1 6 9 1 2 1 4 September 1 9 1 13 2 1 8 October 1 34 4 1 37 3			1													-			
$ \begin{array}{c ccccccccccccccccccccccccccccccccccc$	August				1			_	_		2		•••	1		1		•••	
$ \begin{array}{c ccccccccccccccccccccccccccccccccccc$	October	1					_	25	1				1				1	i	7
$ \begin{array}{c ccccccccccccccccccccccccccccccccccc$			_																
$ \begin{array}{c c c c c c c c c c c c c c c c c c c $				<u> </u>	——														
$ \begin{array}{c ccccccccccccccccccccccccccccccccccc$																			
$ \begin{array}{c ccccccccccccccccccccccccccccccccccc$	January	3	1	_	•••		1	70	3	6		•••							_
$ \begin{array}{c ccccccccccccccccccccccccccccccccccc$			-				1	54	2	7	$\frac{2}{2}$			3	1	2			56
$ \begin{array}{c ccccccccccccccccccccccccccccccccccc$	April	1		114	•••	1									1	2			
$ \begin{array}{c ccccccccccccccccccccccccccccccccccc$				86		52	$\overline{2}$	33	2	7	1			5			1		55
$ \begin{array}{c ccccccccccccccccccccccccccccccccccc$			4				_										_	1	
$ \begin{array}{c ccccccccccccccccccccccccccccccccccc$	September	2		59	_	33	2	58	1	13	2	1		1					58
December	November									1								1	38
Total 16 4 1,052 1 390 24 789 55 98 21 2 21 14 9 1,787 671	December									5		•••							
	Total	16	4	1,052	1	390	24	789	55	98	21	2		21		14	9	1,787	671

Undulant Fever-1 case August; deaths, nil.

GRAPH 7.

Typhoid Fever-

Annual Death Rate per 100,000 of Population in New South Wales, 1875–1950. Annual Case Rate per 10,000 of Population in New South Wales, 1898–1950.

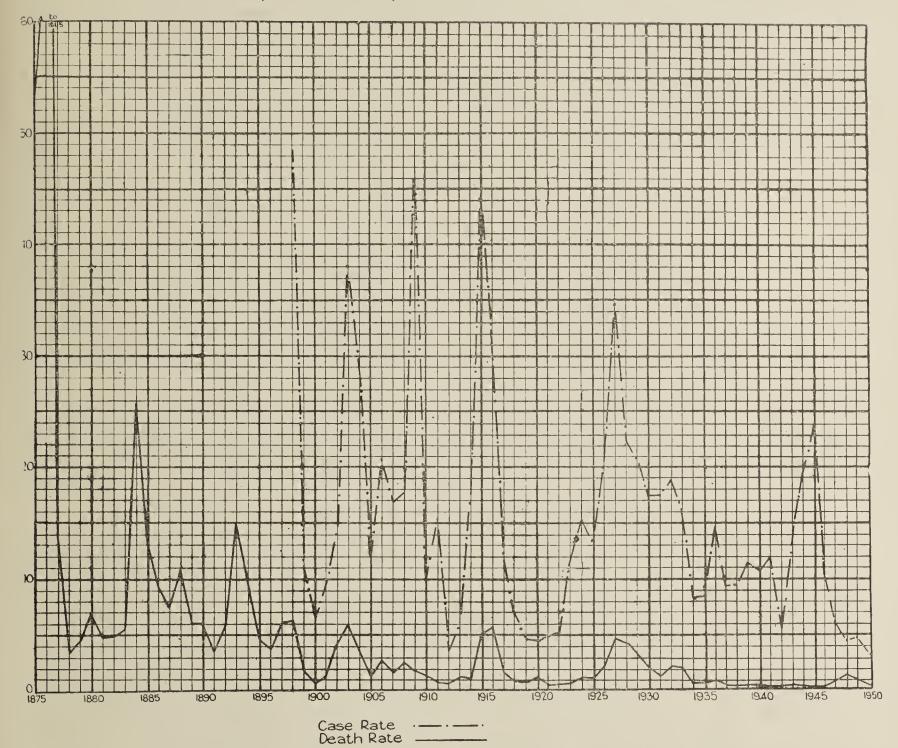


From 1950 all death rates are compiled according to the VIth International classification.

GRAPH 8.

Scarlet Fever-

Annual Death Rate per 100,000 of Population in New South Wales, 1875–1950. Annual Case Rate per 10,000 of Population in New South Wales, 1898–1950.



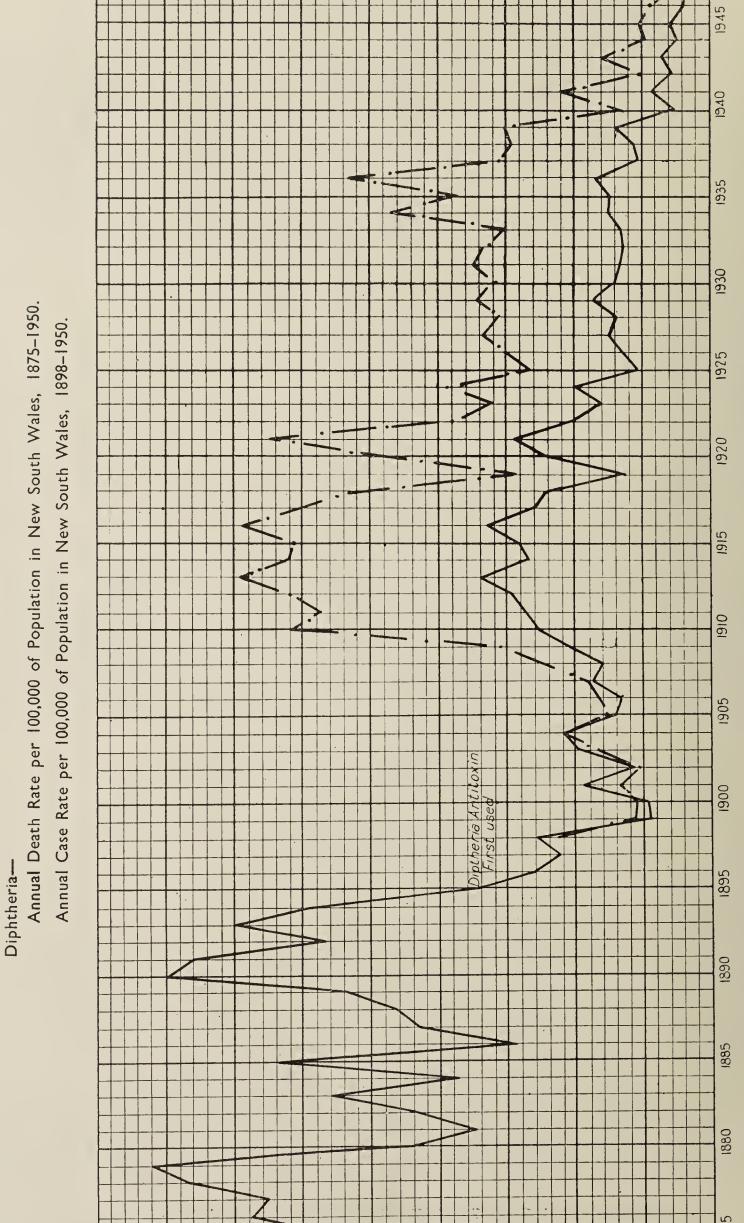
From 1950 all death rates are compiled according to the VIth International classification.

Table IX.—Summary, 1950.

District.	Estimated Mean Population.	Typh and P typh Feve	ara- oid	Sear Feve		Dip		Infa Para		Cere spir Menir	nal	Encep Letha	halitis rgiea.		ohus ver.		peral etion.	Tuber (all fo	culosis, orms)
	1 optimion	С.	D.	С.	D.	C.	D.	С.	D.	С.	D.	C.	D.	C.	D.	C.	D.	C.	D.
Methodelitan Health																			
Metropolitan Health District	1,711,290	6	1	502		162	9	385	20	55	9		• • •	6		9	4	1,285	444
Hunter River Health							_										,	100	~ 1
District	265,750	4	•••	53	• • •	44	3	84	13	7	1	• • •	• • •	2		• • •	1	122	51
South Coast Health District	174,920			40		27	1	38	2	11	1						2	66	36
Richmond-Tweed			'''																
Health District	119,030			15		38	1	6		$\frac{2}{2}$			• • •	11	•••	1	•••	23	$\begin{vmatrix} 11 \\ 34 \end{vmatrix}$
Mitchell Health District	127,260	1	1	124	• • •	5	• • •	$\begin{vmatrix} 36 \\ 2 \end{vmatrix}$	$\frac{3}{1}$	3	1	2	• • •	• • •	• • •	1	•••	18	13
Broken Hill District Remainder of State—	31,020	•••	• • • •	•	•••	•••	•••	4	1	•••	•••	•••	•••	• • •	***	* * *	•••	10	10
Municipalities	266,850	2		131		44	2	88	2	4	2					2	1	114	41
Shires	506,460	3	2	177	1	69	8	145	13	16	7	•••	•••	2		1	1	106	40
Unincorporated	14,720			3		1	• • •	4	1	• • •		•••	•••		•••	• • •	• • •		1
Lord Howe Island	202	•••	•••	•••		•••			• • •	•••	• • • •	•••	***	•••	• • •	• • •	•••		• • •
Migratory	7,390	• • • •	•••	•••	•••	• • •	•••	•••	• • •	•••	• • • •	•••	•••	• • • •	• • •	•••	•••	• • • •	***
Residence outside the								1										2	•••
State Australian Capital Territory	<i>\}</i>	•••	•••	•••	•••	•••	•••	1	•••	•••	•••	•••	•••	•••					
Total, New South Wales	3,224,892	16	4	1,052	1	390	24	789	55	98	21	2		21		14	9	1,787	671

Undulant Fever—Metropolitan Health District: 1 case, deaths, nil.

GRAPH 9.



From 1950 all death rates are compiled according to the VIth International classification.

DIVISION OF SOCIAL HYGIENE.

Staff.

Director.—J. Cooper Booth, M.B., Ch.B. (Edin.)
Deputy Director.—J. H. Abbott, M.B., Ch.M. (Syd.)

Medical Officers.—F. A. BRIERLEY, M.B. (Syd.); J. P. BARRY, M.B., B.S. (Syd.)

Clerical.—L. MAHER, four assistants and typiste.

Senior Clinic Assistant R. C. Lewry, with Clinic Assistant and seven attendants.

The notifications of venereal diseases have continued to decrease in number and the total for this year (2,453) is 590 less than the previous year—a fall of 19.4 per cent.

The decline in the yearly totals has continued since 1945 and the total for 1950 is 54.6 per cent. below that for 1946 and is the lowest recorded since the Venereal Diseases Act, 1918, came into force in December, 1920.

While the decrease has been chiefly in notifications of gonorrhoea, there has been also this year a noticeable decline in syphilis, which has fallen to the lowest total so far of 627 for this year. Three hundred and forty-two of the notifications for syphilis (54.5 per cent.) were new infections.

Among the many things which may have contributed to this continuing decline, the wide use of penicillin has played a major part. The rapidity of control of infection in gonorrhoea has undoubtedly lessened the spread of infection, as has also the treatment and cure of females before the disease becomes deep seated.

Prophylaxis.

The prophylactic facilities at the Divisional Clinic continue to be used by a large number of males and 17,423 treatments were given during the year. Eighty-nine per cent. of such treatments were given during the night, early morning hours and at week-ends.

Divisional Clinic.

There has been a decline in the number of persons seeking examination and treatment for the first time—3,441 for the year 1950, as compared with 3,694 in 1949. Of these new patients 26.2 per cent. were found to be suffering from a venereal disease, as compared with 25.9 per cent. in 1949.

The total attendances made by all persons was 40,659, which was 5,608 less than the previous year.

Publicity.

The year has been very quiet so far as press publicity is concerned. Posters have been displayed throughout the State.

The Medical Journal of Australia, published (on 21st October, 1950) an article by the Deputy-Director of the Division, entitled "Treatment of Syphilis with Penicillin at the Government Venereal Diseases Clinic, Sydney". In the contribution, which was a preliminary report, an account was given of some of the results achieved to date in the Divisional Clinic.

The Director of the Division gave eleven lectures during the year.

VENEREAL DISEASES ACT, 1918.

Report on notifications received during the year ended 31st December, 1950.

Two thousand four hundred and fifty-three notifications of venereal disease were received during the year 1950, a decrease of 590 as compared with the previous year.

Notifications from private practitioners amounted to 19 per cent. of the total, as compared with 12.6 per cent. in 1949 and 20.1 per cent. in 1948. The majority of the notifications (91.8 per cent.) came from the metropolitan area.

Syphilis.

There were 627 notifications of syphilis (427 males and 200 females), a figure 406 below that for the previous year. The sex ratio was 2.1 males to 1 female.

Of the cases notified 13.5 per cent. were being treated privately, as compared with 9 per cent. in 1949 and 15.5 per cent. in 1948.

Syphilis contributed 21.1 per cent. of the total notifications, as compared with 33.9 per cent. in 1949 and 26.4 per cent. in 1948.

Of the syphilitic infections notified 342 cases (54.5 per cent.) were classified as early infections, as compared with 507 (49.2 per cent.) in 1949 and 618 (55.8 per cent.) in 1948.

The notifications of syphilis gave an incidence of 19.3 per 100,000 of mean population, as compared with 33.2 in 1949 and 36.5 in 1948.

Gonorrhoea.

Of the total notifications received during the year 1,657 were for gonorrhoea (1,483 males and 174 females) which was a decrease of 179 on the number received during the previous year. The sex ratio was 8.5 males to 1 female.

The notifications received from private practitioners amounted to 18 per cent. of the total gonorrhoea, as compared with 13.9 per cent. in 1949 and 19.2 per cent. in 1948. The percentage of gonorrhoea in the total notifications of venereal disease received during 1950 was 67.5 per cent., as compared with 60.3 per cent. in 1949 and 60.8 per cent. in 1948.

The notifications of gonorrhoea gave an incidence of 51.1 per 100,000 of mean population, as compared with 58.9 in 1949 and 95.1 in 1948.

Other Forms of Venereal Disease.

Soft Chancre (Chancroid).—One case (male) was reported. Gonococcal Ophthalmia.—There were no notifications.

Venereal Warts.—Ninety-six cases were notified (ninety-one males and five females).

Gleet.—There were seventy-two notifications.

Venercal Granuloma.—There were no notifications.

Failure to Continue Treatment.

During 1950 the names and addresses of 821 defaulters (730 males and 91 females) were notified. This figure was 137 below that for the previous year.

Because of inaccurate information given by patients or because of failure to notify change of address, 253 letters were returned unclaimed.

The following table shows the percentage of defaulters who remained permanent defaulters:—

Year.	Total Defaulters Notified.	Resumed Treatment, Died or Left State.	Remained in Default.	Percentage Remaining in Default.
1948	1,057	653	404	38.2
1949	958	604	354	36.9
1950	821	545	276	33.6

Prosecutions.

Action was taken against 400 persons for breach of section 5 of the Act (failure to continue under treatment).

Clinics.

Attendances at clinics for males totalled 47,992 (84.7 per cent. of this total being attendances at the clinic in the Division of Social Hygiene) as compared with 59,585 in 1949 and 72,459 in 1948.

At the clinics for females the attendances were 8,924 (62.6 per cent. of this total attendance being at the Special Clinic at the Rachel Forster Hospital for Women and Children), as compared with 11,040 in 1949 and 11,775 in 1948.

The sex ratio of attendances was 5.4 males to 1 female as compared with 5.4 males to 1 female in 1949 and 6.1 males to 1 female in 1948.

Metropolitan District.—Ten clinics are available. Of these one is for males only and one for females only.

The clinic at the Division of Social Hygiene is continuous from 9 a.m. to 5.30 p.m., Monday to Friday.

Prophylactic facilities are continuously available at the Divisional Clinic every day, and 17,423 prophylactic treatments were given during 1950.

Newcastle District.—The clinic at the Royal Newcastle Hospital provided 74.1 per cent. of the notifications of venereal disease from the Newcastle District. Prophylactic facilities are available at the hospital.

District General Hospitals.—Treatment is available at country General Hospitals.

Bed Accommodation.—Beds are available in the metropolitan area for males and females as required.

Pathological Examinations.

During 1950 the Pathological Laboratories earried out 48,811 serologic tests for venereal disease.

Smears examined for the presence, or otherwise, of gonococci totalled 4,135.

Five hunrded and three examinations were made for treponema pallidum (472 in the Division of Social Hygiene) as compared with 736 for the previous year.

The following Tables are appended:-

Table I.—Notifications received during 1950, arranged in order of district from which notification came.

Table II.—Return of eases of venereal disease notified during 1950, showing forms of disease and age and sex of patient.

Table III.—Summary of total attendances at various pubclinics during 1950.

ETABLE I.—Notifications received during 1948 to 1950, arranged in order of districts.

	Metro	opolitan	Area.		Tewcas Distric			emain of Stat	
	1948.	1949.	1950.	1948.	1949.	1950.	1948.	1949.	1950.
Gonorrhoea Syphilis Soft Chancre Gleet Venereal Warts Gon. Ophthalmia Venereal Granuloma	1,021	1,618 930 94 78	1,517 565 1 72 96	161 42 	147 51	84 32	81 44 	71 52 1	56 30
Total	3,871	2,720	2,251	203	198	116	125	125	86

Table II.—Return of Cases of Venereal Diseases notified during 1950 showing Forms of Disease and Age and Sex of Patient.

	0-	5.	6-1	10.	11	15.	16	20.	21-	25.	26-	30.	31-	35.	36 -	40.	41-	45.	46-6	50.	Over	50.	Age Stat	not ed.	Tota		Grand Total.
	М.	F.	М.	F.	М.	F.	М.	17.	М.	F.	М.	F.	M.	F.	М.	F.	М.	F.	м.	F.	М.	1 °.	М.	F.	М.	F.	
Gonorrhoea Syphilis Soft Chancre Gleet Venereal Warts Gon. Ophthalmia Venereal Granuloma	3	1 6 		2 1 	1 	3 1 	170 29 10 	29 22 2 	436 76 1 35 	55 46 1 	306 80 34 15 	34 32 1	187 42 7 11 	23 20 1	152 48 9 .8	14 21 	8 4 	7 9 	50 35 5 4 	1 11 	39 67 1 8 4	4 27 	73 18 	1 4 	1,483 427 1 72 91 	174 200 5 	1,657 627 1 72 96
Totals	3	7		3	1	4	209	53	548	102	435	67	247	44	${217}$	35	110	16	94	12	119	31	91	5	2,074	379	2,453

Table III.—Table showing Annual Attendance Returns at Public Clinics for Treatment of Venercal Diseases, 1948, 1949 and 1950. inclusive.

		A44 2	S S S S S S S S S S S S S S S S S S S			New	Cases.				
Year.		Attendances.			Gonorrhoea.		Syphilis.				
	Male.	Female.	Total.	Male.	Female.	Total.	Male.	Female.	Total.		
				HEALTH DEPA	RTMENT CLINE	С.					
$\begin{array}{c c} 1948 \\ 1949 \\ 1950 \end{array}$	56,593 $46,267$ $40,659$	•••	$56,593 \\ 46,267 \\ 40,659$	$\begin{array}{ c c } & 1,131 \\ & 819 \\ & 864 \end{array}$	•••	1,131 819 864	319 358 223	•••	$ \begin{array}{r} 319 \\ 358 \\ 223 \end{array} $		
ROYAL PRINCE ALFRED HOSPITAL.											
$\begin{array}{c c} 1948 \\ 1949 \\ 1950 \end{array}$	$\begin{array}{c} 6,471 \\ 3,854 \\ 2,094 \end{array}$	$\begin{array}{ c c c }\hline & 1,573 & \\ & 717 & \\ & 429 & \\ \end{array}$	8,044 $4,571$ $2,523$	$ \begin{array}{c c} 261 \\ 116 \\ 41 \end{array} $	$\begin{bmatrix} & 37 \\ 5 \\ 9 \end{bmatrix}$	$\begin{array}{c} 298 \\ 121 \\ 50 \end{array}$	120 168 68	$\begin{bmatrix} 50 \\ 32 \\ 18 \end{bmatrix}$	170 200 86		
				Sydney	Hospital.						
$\begin{array}{c c} 1948 \\ 1949 \\ 1950 \end{array}$	5,597 4,459 2,430	$\begin{array}{ c c c }\hline & 1,353 \\ & 1,302 \\ & 1,265 \\ \end{array}$	6,950 $5,761$ $3,695$	$egin{array}{c} 351 \\ 202 \\ 115 \\ \end{array}$	9 6 	360 208 115	$egin{array}{c} 64 \ 36 \ 47 \ \end{array}$	$\begin{vmatrix} 29 \\ 38 \\ 22 \end{vmatrix}$	93 74 69		
				Alexandra H	OSPITAL FOR	CHILDREN.					
$\begin{array}{c c} 1948 \\ 1949 \\ 1950 \end{array}$	$\begin{array}{c} 84 \\ 50 \\ 42 \end{array}$	$\begin{array}{ c c c }\hline & 402 \\ 272 \\ 142 \\ \end{array} $	$486 \\ 322 \\ 184$	1	$\begin{bmatrix} & 6 \\ 4 \\ 1 \end{bmatrix}$	7 5 1	$\begin{array}{c} 2\\ 2\\ 3 \end{array}$	$\left \begin{array}{c}4\\3\\2\end{array}\right $	6 5 5		
				OYAL SOUTH S	SYDNEY HOSPI	TAL.					
$\begin{bmatrix} 1948 \\ 1949 \\ 1950 \end{bmatrix}$	$191 \\ 141 \\ 110$	51 45 113	242 186 223	2 5 2	$\left \begin{array}{cc} & 1 \\ & \cdots \\ 1 \end{array}\right $	$\begin{bmatrix} 3 \\ 5 \\ 3 \end{bmatrix}$	$egin{array}{c} 4 \ 2 \ 3 \end{array}$	$\left egin{array}{c} 1 \ 1 \ 4 \end{array} \right $	5 3 7		
					Shore Hospit						
$\begin{bmatrix} 1948 \\ 1949 \\ 1950 \end{bmatrix}$	$727 \\ 346 \\ 192$	724 616 554	$ \begin{array}{r} 1,451 \\ 962 \\ 746 \end{array} $	$ \begin{array}{c c} 23 \\ 15 \\ 4 \end{array} $	2 	$\begin{bmatrix} 25\\15\\4 \end{bmatrix}$	$\begin{array}{c c} & 12 \\ 4 \\ 4 \end{array}$	8 9 6	20 13 10		
					STRICT HOSPIT	'AL.					
$egin{array}{c} 1948 \\ 1949 \\ 1950 \\ \end{array}$	2,252 $4,236$ $2,422$	1,360 1,415 816	$3,612 \\ 5,651 \\ 3,238$	98 91 50	$\begin{array}{c c} & 13 \\ & 12 \\ & 8 \end{array}$	$oxed{111} \ 103 \ 58$	$egin{array}{c} 22 \\ 31 \\ 22 \\ \end{array}$	$\begin{array}{c c} & 12 \\ & 13 \\ & 6 \end{array}$	$\begin{array}{c} 34 \\ 44 \\ 28 \end{array}$		
				EL FORSTER H	OSPITAL FOR	Women.					
$egin{array}{c} 1948 \\ 1949 \\ 1950 \\ \end{array} \ $	•••	$\begin{bmatrix} 6,278 \\ 6,663 \\ 5,591 \end{bmatrix}$	$\begin{array}{c} 6,278 \\ 6,663 \\ 5,591 \end{array}$	•••	$\begin{array}{ c c } & 112 \\ & 80 \\ & 62 \\ \end{array}$	$egin{array}{c} 112 \\ 80 \\ 62 \\ \end{array}$	•••	94 95 83	94 95 83		
					STRICT HOSPIT	ſAL.					
1948 1949 1950	244 232 43	34 10 19	$\begin{array}{ c c }\hline & 278 \\ 242 \\ 62 \\ \hline \end{array}$	7 1 1		7 1 2	4 2 1	$\begin{bmatrix} & 3 \\ & \dots \\ & 1 \end{bmatrix}$	7 2 2		

CONSULTATIVE COUNCIL FOR THE PHYSICALLY HANDICAPPED (ACUTE ANTERIOR POLIOMYELITIS).

Meetings.

Thirteen meetings of the Council were held during the year and twelve of the Executive Committee.

Personnel.

Following the resignation of Dr. E. H. M. Stephen as Chairman in July, 1950, Dr. S. W. G. Rateliff was appointed Chairman by the Minister for Health as from August, 1950.

Mrs. Lee Martin was appointed in June, 1950, as a co-opted member representing the Occupational Therapists.

Miss N. Firth resigned from position as Almoner in July, 1950, and Mrs. I. May was temporarily appointed in November, 1950.

NOTIFICATIONS (compiled according to date of onset).

The increased incidence of poliomyelitis in New South Wales commencing in November, 1949, continued throughout 1950, rising rapidly in November and December of that year.

Seven hundred and ninety-one eases were notified during the year, the months of onset being as follows:—

1949-	-November								2
—	-December	 				 			19
	-January								76
,,	February					 ٠			48
"	March	 							53
"	April	 	 		٠				53
"	May	 							55
"	June	 							24
"	July	 							27
"	August .	 							55
"	September								50
"	October	 							75
	November								124
"	December								92
"	Queried								38
"	Q acrica		•						
									791

Table I.—465 cases were males (58.78 per cent.); 326 cases were females (41.22 per cent.).

Age.—540 cases (68.27 per cent.) were under the age of 15 years. The youngest reported was aged 11 days at the onset (the mother of this child became severely paralysed immediately after the confinement). The two oldest cases were aged 71 and 72 years.

TABLE II.

HOUSE I				1
Ages.	Males.	Females.	Total.	Per Cent.
Under 1 year 1-4 years 5-9 ,, 10-14 ,, 15-19 ,, 20-24 ,, 25-29 ,, 35-39 ,, 40 years and over Total	8 126 132 74 57 30 13 12 5 8	3 80 75 53 43 35 24 2 3 8	11 206 207 127 100 65 37 14 8 16	1·5 26·1 26·1 16·0 12·6 8·2 4·8 1·7 1·0 2·0

Distribution.

Three hundred and seventy-nine eases were from the metropolitan area; 412 from the following rural districts:—

Hunter River Health District	85
South Coast Heatth District	36
Mitchell Health District	
Richmond-Tweed	5

Shires.

Kyeamba	 	• •	7.9
Stroud	 		12
Gundagai	 		9
Gosford	 		6
Wellington	 		6
Lockhart	 		6
Eurobodalla	 		5
Waugoola	 	٠.	5
Blacktown	 		4
Wyong	 		4
Wade	 		4

*81687--3

Mitchell	4
Tumut	$\tilde{4}$
Walgett	$\overline{4}$
Goobang	3
Timbrebongie	3
Mumbulla Crookwell	3
Crookwell	2
Namburra	$\frac{1}{2}$
Weddin	$\frac{1}{2}$
McIntyre	$\overline{2}$
Carrathool	
Culcairn	$\frac{2}{2}$
Barraba	$\bar{2}$
Namoi	
Wallarobba	$\frac{2}{2}$
Boomi	2
Wollondilly	$\frac{1}{2}$
Illabo	ī
Mandowa	1
Lachlan	1
Canobolas	1
Nambucea	1
Coreen	1
Burrangong	$\stackrel{\scriptscriptstyle\perp}{1}$
Patrick Plains	1
Patrick Plains	1
Uralla	1
	1
Finley	1
Coolamon	1
Dland	1
Bland	1
Mitchell	1
Turon	1
Holbrook	1
Goodradigbee Manning Bingara	
Manning	1
Bingara	$\frac{2}{1}$
Bogan	
Talbragar	1
Oberon	1
Colo	1
Boree	1
Dorrigo	1
Maeleay	1

Shires—eontinued.

Municipalities.

Wagga Wagga	25
Dubbo	8
Muswellbrook	6
Penrith	6
Queanbeyan	6
Gundagai	5
Yass	5
Goulburn	5
Narromine	4
Coonamble	4
Wellington	3
Kempsey	3
Parkes	3
	$\frac{3}{2}$
	ച റ
Moree	dani)
Tumbarumba	1
Cowra	1
Bega	1
Seone	1
Tamworth	1
Wentworth	1
Mauilla	$\overline{1}$
Cootamundra	1
Cootanundra	1
Condobolin	
Inverell	1
Narrabri	1

Hospital Accommodation.

Four hundred and thirty-seven eases were admitted to metropolitan hospitals:—

Prince Henry Hospital	226
Royal Alexandra Hospital for Children	193
Royal Prince Alfred Hospital	10
North Shore Hospital	2
Ryde District Hospital	1
Sydney Hospital	1
Auburn District Hospital	1
Renwick Hospital	1
Canterbury Hospital	1
St. Vincent's Hospital	1
	427

Three hundred and twenty-six cases were admitted to the following country hospitals:—

Women Women Dave Hamilt I	05
Wagga Wagga Base Hospital	82
Waratah	66
Dubbo	$\frac{22}{21}$
Bathurst	
Maitland	15
Royal Newcastle	11
Goulburn	10
Orange	9
Tamworth	7
Brentwood	6
Brentwood Wollongong Canberra	6
	6
Macleay	4
Inverell	4
Temora	5
Bega	4
Griffith	3
Albury	3
Dangar Cottage	3
Coonamble	3
Narrabri	3
Wellington	3
Moree	3
Lismore	2
Broken Hill	$\frac{2}{2}$
Young	
Manning	2
Wyalong	1
Katoomba	1
Cowra Immigration	1
Parramatta	1
Cootamundra	1
Wentworth	1
Bindawalla	$\bar{1}$
Nambucca	î
Armidale	1
Scott Memorial	$\bar{1}$
Brisbane	î
Tweed	ī
Lithgow	î
Brewarrina	$\dot{1}$
Walgett	1
Walgett Parkes	1
Coffs Harbor	1
Wangaratta	1
Wangaratta Toowoomba	1
Toowoomba	T

Twenty-eight cases were nursed at home.

Cancellations.

An additional forty-one notifications were later cancelled owing to amended diagnosis as follows:—

Ascending paralysis of Landry	2
Encephalitis	3
Pyrexia of unknown origin	1
Pneumonia	1
Fibrositis	$\hat{\bar{3}}$
Tracheitis	1
Lymphosarcoma	$\hat{1}$
Infective Polyneuritis	1
Cerebral Thrombosis	î
Influenza	$\overline{2}$
Guillain Barre Sundrome	$\bar{2}$
Rheumatic Fever	2
Slipped Epiphysis of Femur	$\bar{1}$
Acute Osteo-myelitis	$\frac{1}{2}$
Spinal Tumour	$\bar{1}$
Concussion	$\hat{1}$
Local Condition L. Leg	î
Coryza	î
Functional paresis and neuritis	ī
Not stated	$1\overline{3}$
	41

Table III.—Deaths: Fifty-one cases were fatal. Thirty-six males (7.7 per cent. of the total males), fifteen females (4.6 per cent. of the total females).

Table IV.—Deaths according to age at onset:

1950.	Under 1 yr.	1-4.	5-9.	10-14.	15-19.	20-29.	30-40.	Over 40 yrs.
Total cases notified	11	206	207	127	100	102	22	16
Died	2	5	11	4	15	11	2	1
Percentage	18.2	2.4	5.3	3.1	15	10.8	9.1	6.2

In forty-one fatal cases in whom the duration of illness has been checked the period varied from one day (one case) to six months (one case).

Twenty-nine cases were fatal within seven days.

Thirty-six cases were fatal within fourteen days.

Types of Illness and Severity.

Information in this regard is still being correlated and will be combined in a later report.

After-care.

As the epidemic increased the council received more applications for arrangements regarding after-care and financial assistance for patients being discharged from hospital.

Payment was made for domiciliary physiotherapy in eight cases, transport to an out-patient department in one case, and appliances in two cases.

Physiotherapy fees were also paid for thirty-three poliomyelitis patients staying at the Far West Children's Home, Manly.

By arrangement with the Far West Children's Health Scheme, an orthopaedic surgeon visiting under the auspices of their organisation saw poliomyelitis patients for the council at Albury, Narrandera, Griffith, Temora, Cootamundra and Goulburn.

Consultant surgeons continued to visit country centres to advise on the after-care of poliomyelitis. Visits were paid to Dubbo, Bathurst, and Wagga Wagga.

Financial Statement.

Expenditure charged from 1st January, 1950, to 31st December, 1950, excluding salaries:—

Transport Expenses Muscle Re-education Equipment			•						27 319 45	s. 10 18 6	0 6
General Expenses .	• •	•	• •	•	•	•	• •	•	£413	0 15	

Vocational Training.

Eight persons were assisted under the Vocational Training Grant.

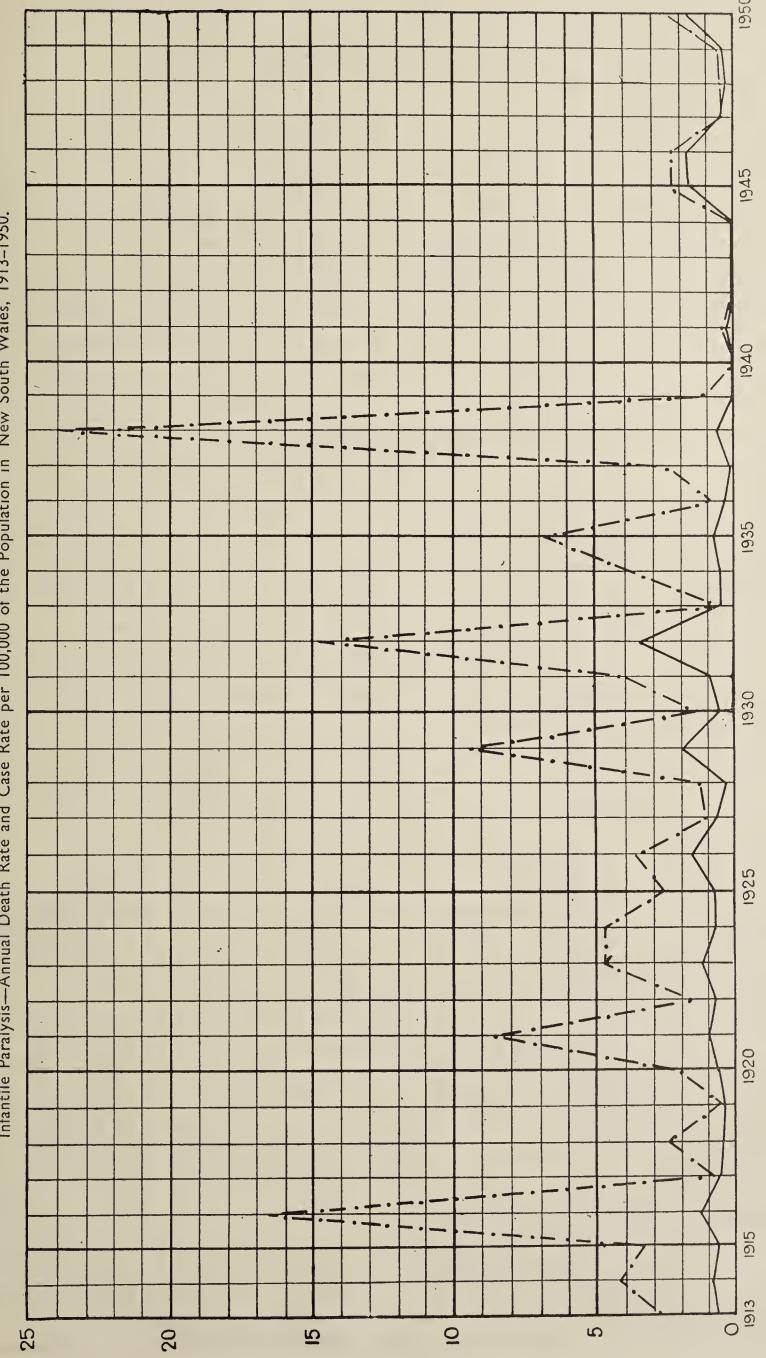
Three received Occupational Therapy.

- (i) (R.E.) aet 7 years (post encephalitis).
- (ii) (L.J.) aet 14 years (epilepsy ataxia).
- (iii) (G.C.) aet 15 years (cerebral hemorrhage).
- One (W.W.) aet 21 years (poliomyelitis and osteomyelitis) continued his course at the Hawkesbury Agricultural College passing his second-year examinations.
- One (P.M.) aet 24 years. (Talipes) completed a course in chiropody.
- One (C.M.) aet 23 years. (Poliomyelitis) commenced a course in surgical bootmaking.
- One (G.P.) aet 21 years. (Poliomyelitis) studied for and passed his Leaving Certificate examination.
- One (S.H.) aet 16 years. (Poliomyelitis) studied typewriting while an in-patient at Yaralla, Concord.

The expenditure on vocational training amounted to £259 7s. 2d.



GRAPH 10.



Death Rate Case Rate

B. PUBLIC HEALTH ADMINISTRATION.

REPORT OF THE GOVERNMENT ANALYST FOR THE YEAR ENDED 31st DECEMBER, 1950.

Staff.

Government Analyst.—HAROLD B. TAYLOR, M.C., V.D., D.Sc., F.R.I.C., F.R.A.C.I.

Deputy Government Analyst.—Arthur D. Dibley, A.S.T.C., A.R.A.C.I.

Senior Assistant Government Analyst.—ROBERT G. O'BRIEN, A.S.T.C., F.R.A.C.I.

Analysts.—Ernest S. Ogg, B.Se. (Hon.), A.R.A.C.I.; William F. Fisher, A.S.T.C., A.R.A.C.I.; Thomas A. McDonald, A.S.T.C., A.R.A.C.I.; Anthony Dadour, B.Se.; Lister G. Clark, A.S.T.C., A.R.A.C.I.; John S. Plowman, A.S.T.C., A.R.A.C.I.; John W. G. Neuhaus, A.S.T.C., A.R.A.C.I.; Gordon E. Whiteman, B.Se.; Colin Anderson, B.Se.; Vivian C. Mahoney, B.Se.

Laboratory Assistants.—VICTOR WILLIAMS; JOHN A. HORAN, H.D.D.; NORMAN H. PIPER.

Laboratory Assistants-in-Training.—BARRY NEILL; HARRY MIDDLETON; JOHN G. BRIDGES.

Laboratory Attendant.—IVAN RATCLIFFE.

Shorthandwriter and Typist.—Marie Kemp.

Office Assistants.—Vera Spiers; Margaret Ryan.

The number of samples examined in the Chemical Laboratory during the year 1950 amounted to 27,333, comprising 24,495 samples submitted in connection with the administration of the Pure Food Act, and 2,838 samples examined for the public services of the State and miscellaneous authorities.

Numerically, milk was the principal subject of investigation under the Pure Food Act. A total of 17,024 samples were examined, including 5,869 samples collected in the metropolitan area by food, municipal and shire inspectors, 2,812 samples collected by the same authorities in country districts, and 8,343 samples submitted by the Milk Board.

Of the total number of milks collected in the metropolitan area, 1.9 per cent. contravened the standard, while 8.27 per cent. of those collected in the country, and 2.7 per cent. of the samples submitted by the Milk Board failed to conform.

The following table gives particulars of the districts of collection and the kind and proportion of adulterations found:

District of Collection		politan ea.		intry cricts.	Submitted by Milk Board.		Total.	
Number of milk samples collected	5,	869	2,812		343	17,024		
Number and proportion of adulterated samples— Deficient in milk-fat Contained added water Deficient in milk-fat and contained added water Contained dirt	No. 65 41 6	Per cent. 1·108 0·69 0·102 	No. 153 76 3 1	Per cent. 5.44 2.702 0.106 0.03	No. 127 94 6	Per cent. 1.51 1.12 0.07	No. 345 211 15 1	Per cent. 2.02 1.23 0.08 0.05
Total adulterations	112	1.900	233	8.278	227	2.70	572	3.38

The samples other than milk submitted in connection with the administration of the Pure Food Act amounted to 7,471, of which 819 were found to be adulterated or falsely described.

The following table gives particulars of the whole of the food and drug adulterations recorded:

Nature of Sample.	Number of Adulterated Samples.	Particulars of Adulteration.	Nature of Sample.	Number of Adulterated Samples.	Particulars of Adultoration.
Apple juice	2	Unsuitable for human consumption.	Brought forward	196	
Banana buttor	1	Contained foreign fat and	Fish	7	Artificially coloured.
		starch.	,, paste	3	Tins found to be blown.
Beer	6	Contained added water.	Flour	2	Contained foreign matter
_ ,, waste	$\frac{2}{2}$	No methyl violet present.			in the form of chlorin-
Beetroot, pickled	1	Found to contain sacc-		_	ated fatty compounds.
70 - 1	100	harin.	,,	1	Available carbon dioxide
Bread	106	Physical characteristics unsatisfactory.	G: 1-		below standard.
brown	37	Deficient in crude fibre.	Ginger ale	2	Found to contain saccharin.
,, wholemeal	3		Golden shandy drink	1	narm.
" wheatmeal	3	,, ,, ,,	Grape - fruit fruit juice		Deficient in fruit juice.
Butter	3	Contained excess water.	cordial.	1	Benefert in fruit Juice.
99	1	Found to be rancid.	Jam (berry)	8	Found to contain a con-
Cherries in maraschino flavouring.		Preservative not declared.	(siderable proportion of apple jam.
Cherry cordial liqueur, imitation.		Deficient in sugar.	,,	1	Unsuitable for human consumption.
Coffee, concentrated pure	1	Deficient in caffeine.	,,	6	Deficient in fruit content.
essence.			,,	6	Contained extraneous
Coffee and chicory essence	3	Infested with insects.			phosphate.
Confectionery (chocolate easter egg).			Kola		Found to contain saccharin.
Cordials		Unfit for sale.	Lemon butter	2	Found to contain foreign
Cream		Deficient in milk-fat.			fat.
Cream substitutes	3	Found to be artificially coloured.	,,	. 4	Deteriorated and unfit for
Fish	. 8	Unsuitable for human	Lemon cordials, drinks, etc.	. 5	human consumption. Deficient in fruit juice.
		consumption.	,, ,, ,, ,,	1 4	Found to contain sacc.
99	. 2	Preservatised and in-	,, ,, ,, ,,		harin.
		correctly labelled.	,, j, ,, ,,	. 1	Contained added organic
Clampia 1 famous 1	100				acid.
Carried forward	196		Carried forward	0=9	
			Carried forward	253	

Margarine	Nature of Sample.	Number of Adulterated Samples.	Particulars of Adulteration.
Lime cordials, drinks, etc. """""""""""""""""""""""""""""""""""	Brought forward	253	
Deficient in fruit juice and citric acid. Deficient in fruit juice, citric acid and sugar. Found to contain saccharin. Found to be artificially coloured. Meat, fresh 23 mineed 223 mineed 223 mineed 223 mineed 223 mineed 223 mineed 224 mineed 223 mineed 223 mineed 224 mineed 224 mineed 225 mineed 226 mineed 227 mineed 227 mineed 228 mineed 228 mineed 229 mineed 228 mineed 229 mineed 23 mineed 24 mineed 25 mineed 26 mineed 27 mineed 27 mineed 28 mineed 29 mineed 29 mineed 29 mineed 20 mineed 21 mineed 22 mineed 23 mineed 24 mineed 25 mineed 26 mineed 27 mineed 28 mineed 29 mineed 29 mineed 29 mineed 20 mineed 2			Deficient in fruit juice
Margarine			Deficient in fruit juice and
Margarine	99 99 99 99	1	Deficient in fruit juice,
Meat, fresh 23 , minced 223 , sausages 224 , sausage casing 1 , tripe 3 , smallgoods 4 , smoked mutton 4 , powdered 21 , powdered 21 , powdered 25 Passionfruit drinks 1 Peaches, unsweetened, tinned 27 , mand 27 Peaches, unsweetened, tinned 27 Pears, tinned 27 Pepper 28 Pepper 29 Pepper 29 Pepper 29 Pepper 20 Pepper 20 Pepper 20 Pepper 20 Pepper 21 Pears, tinned 1 Peas, tinned 21 Peas, tinned 25 Pepper 26 Pepper 27 Peikles 27 Pineapple fruit juice cordial 27 Raspberry imitation cordial 28 Raspberry fruit juice cordial 31 Raspberry imitation cordial 32 Raspberry imitation cordial 34 Raspberry imitation cordial 35 Raspberry imitation cordial 45 Raspberry imitation		2	
Meat, fresh 223		_	harin. Foun d to be artificially
mineed 224	Meat, fresh	23	
mined. Peaches, unsweetened, tinned. """""""""""""""""""""""""""""""""""	,, mineed		Excess of permitted
milk, fresh			Contained zinc chloride.
Section Sect	"	1	Did not comply with
Milk, fresh 345 Meficient in milk-fat. 345 Moral added water. Deficient in milk-fat and contained added water. Contained and unsuitable for human consumption. Unsuitable for food. Found to contain sace-harin. Contained excess preservative. Unsuitable for human consumption. Proportion of tims containinated with hydrogen sulphide. Deficient in fruit content. Found to be artificially coloured. Contained foreign starch. Fermented. Not labelled according to regulations. Found to contain sace-harin. Found to contain sace-harin. Pound to contain excess preservative, saccharin and artificial flavouring matter. Contained artificial flavouring matter. Deficient in sugar. Unfit for food. Did not comply with Pure Food Act. Contained excess free caustic alkali. Incorrectly labelled. Found to contain added water. Deficient in milk-fat and contained added water. Deficient in milk-fat and contained according to result alkali. Incorrectly labelled. Found to contain added water. And in milk-fat and contained according to result for food. Found to contain added water. Contained according to regulations. Found to contain added water. Contained excess free caustic alkali. Incorrectly labelled. Found to contain benzoic acid. Unfit for human eonsumption. Wine 5 milk for human eonsumption. """ """ """ """ """ """ """ """ """ "	shootlems	4	limits of pH. Found to be unsatis-
Milk, fresh 345 Deficient in milk-fat. Contained added water. Deficient in milk-fat and contained added water. Contained dirt. Rancid and unsuitable for human consumption. Unsuitable for food. Found to contain saceharin. Contained added phosphorie acid. Contained added phosphorie acid. Contained excess preservative. Unsuitable for human consumption. Peaches, unsweetened, tinned. Pears, tinned 1 Pears, tinned 1 Pears, tinned 2 Found to be artificially coloured. Contained foreign starch. Fermented. Not labelled according to regulations. Found to contain saceharin. Found to contain saceharin. Raspberry fruit juice cordial Rations, military Raspberry fruit juice cordial Rations, military Raspberry imitation cordial Rations, military Raspberry fruit juice cordial Rations, military Raspberry f	amokad muttan	4	factory. Found to be artificially
Contained added water. Deficient in milk-fat and contained added water. Deficient in milk-fat and contained added water. Contained dirt. Rancid and unsuitable for human consumption. Unsuitable for food. Found to containe added phosphoric acid. Contained excess preservative. Unsuitable for human consumption. Peaches, unsweetened, tinned.	,,	345	coloured.
contained added water. Contained dirt. Rancid and unsuitable for human consumption. Passionfruit drinks	,, ,,		Contained added water.
Rancid and unsuitable for human consumption. Unsuitable for food. Unsuitable for food.	,, ,,	_	contained added water.
Olives	" " Jone d		Rancid and unsuitable for
Passionfruit drinks			Unsuitable for food.
phorie acid. Contained excess preservative. Unsuitable for human eonsumption. Pears, tinned Pears, tinned Peas, tinned Pepper Peas, tinned Peopre Peas, tinned Pe			harin.
Peaches, unsweetened, tinned. """" Pears, tinned	Passionfruit drinks	1	
Peaches, unsweetened, tinned. """""""""""""""""""""""""""""""""""	,, ,,	1	~
Pears, tinned		1	Unsuitable for human
Pears, tinned Peas, tinned Pickles	02222	1	Proportion of tins contaminated with hyd-
Coloured. Contained foreign starch. Fermented. Not labelled according to regulations. Found to contain excess preservative, saccharin and artificial flavouring matter. Contained artificial flavouring matter. Contained artificial flavouring matter. Deficient in sugar. Unfit for food. Refrigerator shelving, cadmium plated. Soap, liquid 3 Contained excess free caustic alkali. Incorrectly labelled. Spirits Sound to contain added water. Found to contain added water. Found to contain added water. Found to contain benzoic acid. Unfit for human eonsumption. Walnuts, shelled 1 Unfit for human eonsumption. Wine 5 " " " "			Deficient in fruit content.
Piekles	Peas, tinned	2	coloured.
Tomato sauce Walnuts, shelled """ """ """ """ """ """ """	- II	$\begin{bmatrix} 2 \\ 2 \end{bmatrix}$	
Pineapple fruit juice cordial Raspberry fruit juice cordial Raspberry imitation cordial Rations, military			Not labelled according to
Pineapple fruit juice cordial Raspberry fruit juice cordial Raspberry imitation cordial Rations, military	,,	2	Found to contain sace-
Raspberry fruit juice cordial Raspberry imitation cordial Rations, military	Pineapple fruit juice cordial	1	Found to contain excess
Raspberry fruit juice cordial Raspberry imitation cordial Rations, military			and artificial flavouring
Raspberry imitation cordial Rations, military	Raspberry fruit juice cordial	1	Contained artificial
Refrigerator shelving, cadmium plated. Soap, liquid	Raspberry imitation cordial	_	Deficient in sugar.
mium plated. Soap, liquid	Refrigerator shelving, cad-		Did not comply with Pure
Soda squash	mium plated.	3	Contained excess free
water. Tomato sauce	Soda squash	_	Incorrectly labelled. Found to contain added
Walnuts, shelled	(overproof rum)		Found to be underproof.
Wine 5 ,, ,, ,,		_	acid. Unfit for human eon-
	Wine	5	
Total adulterations 1.391	Total adulterations	1,391	

Samples Submitted for the Public Services of the State.

The samples submitted for the public services of the Stato amounted to 2,556, a brief summary of which is shown hereunder:

Subsidised Institutions required the examination of 331 samples consisting of blood, cerebrospinal fluid, foodstuffs, drugs, urine, etc.

The Government Stores Department submitted 391 samples for examination, including drugs and pharmacopoeial substances, inks, insecticides, lubricants, paints, soaps, etc.

Police Authorities forwarded 190 exhibits for examination in connection with criminal investigations and forty-one in

regard to the administration of the Police Offences Amendment (Drugs) Aet; the following table gives details of the various charges investigated:

Particulars of Charge.	Number of Exhibits.
Criminal Investigations. Alleged breach of Liquor Act. Arsenical poisoning Attempted poisoning Attempted suicide Break, enter and steal Doping of racehorses Driving under influence Indecent assault Fail to stop after accident Manslaughter Miscellaneous Murder Rape Suicide Suspected poisoning. Theft Uncertified deaths	3 6 2 3 5 1 5 10 6 5 45 20 4 13 22 15 25
Police Offences Amendment (Drugs) Act. Cocaine Morphine Mariuanha Total Exhibits	1 39 1 231

Coroners' Inquiries.—Coroners required the examination of 772 exhibits in connection with 311 deaths which formed the subject of police investigation. The following tables gives particulars of the results of chemical examination:

-				
Natu	re of Ex	hibit.	Result of Chemical Examination.	Number of Deaths.
Viscera	(stoma	ch and	Negative for poison	. 63
		tinesand	Tregario to Porton	
	rgans).			ŀ
,,	,,	,,	Arsenic	7
,,,	,,	,,	Barbital	1
11	,,	,,	Barbiturate	4
11	,,	,,	Barbituric acid	2 1
>>	1)	,,	Bromine	1
11	11	,,	Chloral hydrate	
21	"	,,	Cyanide	2 5
"	"	,,	Formaldehyde	ĺ
"	"	,,	Hexaethyltetraphosphate	1
,,	,,	,,	Lead	2
,,	1)	,,	Mercury	1
,,	,,	,,	Nicotine	1
,,	1)	,,	Paraldehyde	2
,,,	12	,,	Phenobarbital	$\frac{4}{2}$
11	,,	,,	Phenobarbitone	$\frac{2}{1}$
17	1)	,,	ProminalQuinine and salicylic acid	1
11	"	"	Salicylic acid	1
11	"	"	Salicylic acid, phenacetin and caffeine	î
"	"	,,	Sedormid	ĩ
"	11	,,	Strychnine	11
"	11	,,	Strychnine and quinine	1
,,	,,	,,	Thallium	1
Viscera a	and bloc	od	Positive for chloral hydrate and potassium	1
			bromide.	_
9.7	,,,		Positive for chloral hydrate and alcohol	1 10
3.7	2.9		Negative for poison; positive for alcohol	12 4
,,	11		Negative for poison and alcohol	1
"	"	•••••	Positive for bromide; negative for alcohol	i
"	11		Positive for alcohol	î
>>	,,,		Positive for arsenic; negative for alcohol	1
Viscera	and urin		Positive for nembutal	$\frac{2}{2}$
"	33		Negative for poison and alcohol	
,,	,,		Positive for arsenic; negative for	1
			barbiturate.	-
,,	,,		Positive for alcohol	$\frac{1}{2}$
,,	,,,		Negative for poison; positive for alcohol Positive for barbiturate	ī
Vizoono	blood	nd urine	Positive for potassium bromide and alcohol	
		nd urine	Negative for alcohol	24
			Positive for alcohol	59
,,			Positive for alcohol and carbon monoxide	1
,,			Positive for drowning	2
,,			Negative for drowning	1
,,			Positive for nembutal	1
			Positive for carbon monoxide	8
TT 1			Negative for carbon monoxide Negative for alcohol	8
			Positive for alcohol	33
			Positive for phenobarbital	1
Blood at	nd urine		Positive for alcohol	12
Dioot a		*********	Positive for alcohol; negative for drowning	1
Blood, n	rine and	l cerebro-	Positive for alcohol	1
spinal	fluid.	,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,		
		brospinal	Positive for alcohol	2
fluid.				4
		,,	Negative for alcolol	$\frac{1}{1}$
Tissues		-4	Negative for poison	2
Urine	and	stomach	Positive for alcohol	-
conte	nts.		Total Deaths	311
			TOURI Promits	

The Police Department also submitted four exhibits of animal viscera for examination in connection with the suspected poisoning of animals and, in each case, strychnine was found to be present.

State municipal and departmental authorities submitted 367 samples of water in connection with the supervision and chemical treatment of water supplies and swimming pools in country districts, and ninety-four samples for examination for the purpose of checking the efficiency of sewage installations and the control of the discharge of trade wastes and drainage into public places.

Industrial hygiene authorities submitted 366 samples for examination in connection with claims under the Workers' Compensation Act, the diagnosis of illness due to occupational causes, conditions of employment in workshops and factories, the ventilation of public halls and theatres, etc.

Miscellaneous authorities submitted 282 samples for examination, including foodstuffs, disinfectants, bedding materials, insecticides, lubricants, human hair and nails, urine, etc.

Table I.—Samples examined during the year 1950 for the purposes of the administration of the Pure Food Act. 1908:

Nature of Sample.	Submitted	by.	Number Ex- amined.	Number Adulter- ated or Falsely Described
cetylsalicylic acid powder	Food Inspectors	3	2	
pple juice	"	• • • • • • • • • • • • • • • • • • • •	23	2
pricots in syrup, tinned	"		$\begin{bmatrix} 1 \\ 2 \end{bmatrix}$	***
Baked beans	,,		$1\overline{2}$	• • • •
Baking powder Banana butter	**		5	•••
Seer	"		$\frac{2}{66}$	1 8
Beetroot, pickled	,,		3	ĭ
Blackberries, fresh	,,	••••	265	1.0
BreadBurandy cordial	"		$365 \\ 1$	149
sutter	,,		30	4
Butter food flavouringabbages	"	• • • • • • • • • • • • • • • • • • • •	2	• • •
apers in vinegar	***		1 1	•••
herries in marashino syrup	,,		1	1
herry cordialsheese, cheddar	//		5	1
igarettes	;; ;;		$\begin{bmatrix} 2\\1 \end{bmatrix}$	•••
itrus cup	",		1	
loves compound cordial ocktail cordials	"		$\begin{bmatrix} 2\\3 \end{bmatrix}$	
ocoa	;;		$\begin{bmatrix} 3 \\ 2 \end{bmatrix}$	• • •
offee	"		$\frac{2}{4}$	
offee and chicory	"		13	3
onfectioneryooking utensils, steel	"		$\begin{bmatrix} 2\\1 \end{bmatrix}$	1
ordials	Municipal Inspe	ctors	$\frac{1}{2}$	1
orn, sweet	Food Inspectors		1	
ornflourough mixture	,,		$\begin{array}{c c} 1 \\ 1 \end{array}$	•••
ream	Milk Board		110	
ream	Food Inspectors		132	6
ream substitutcream of Tartar	,,	•••••	3	3
reaming soda	,,		$\begin{bmatrix} 2 \\ 9 \end{bmatrix}$	***
essert	22		2	
eodorant isinfectant	,,	•••••	1	•••
ripping	"		1 1	•••
airy Flossish, smoked, fresh, tinned, etc.	,,		5	•••
ish paste	,,	•••••	34	17
lour	1 2 2 2		16	$\frac{3}{3}$
oodstuffs ruit juice extractor	"		20	
ruit salad, tinned	12		$\frac{1}{2}$	•••
elatine	,,		ī	•••
inger ale cordials, etcinger spread	**		11	2
olden shandy drink l	>> >>		1 1	
ooseberries, tinned	,, ,,		1	1
rapefruit cordials, etconey	,,		9	1
e cream	**		$\frac{4}{70}$	•••
ing sugar	"		6	•••
nsecticide	,,		1	
ola	**	••••••	$\begin{array}{c c} 30 \\ 12 \end{array}$	$\frac{21}{2}$
emon butter	,,		ii	3 6
emon drinks ime drinks	"		49	10
falt extract	**		29	9
argarine); ;;		$\begin{array}{c c} 1\\12 \end{array}$	
leallelon	,,,		2	
leat, fresh	,,		804	
22 22 22 200000000000000000000000000000	Municipal Inspe	ctors	11	23
" minced	Food Inspectors		1,780	219
,, sausages	Municipal Inspe Food Inspectors	ctors	2,561	$\frac{4}{210}$
22 22	Municipal Inspe	ctors	141	210 14
,, tripe	Food Inspectors		327	7
,, smallgoods	Municipal Inspe Food Inspectors	ctors	162	***
,, tinned	r ood Inspectors		163	4
" sausage casing	,,		1	1
,, with sawdust	**		1	
" smoked mutton	"		5 4	•••
,, corned beef			4	4

TABLE I-continued.

Nature of Sample.	Submitted by.	Number Ex- amined.	Number Adulter- ated or Falsely Described.
Milk, fresh	Food Inspectors, Metro- politan Districts.	4,575	105
,, ,,	Mûnicipal and Shire Inspectors, Metro-	1,294	11
,, ,,	politan Districts. Food Inspectors, Country Districts.	1,151	128
,, ,,	Municipal and Shire Inspectors, Country Districts.	1,663	106
,, ,,	Milk Board	8,343	222
powdered	Food Inspectors	2	2
Milk shake containers	,,	1	•••
Nickel silver fitting	27	1	•••
Oil, edible	,,	1	
Oranga driuks aprdias ata	,,	12	8
Orange drinks, cordias, etc Paraffin, liquid	22	55	4
Passionfruit drinks, cordials, etc.	22	1	•••
Peaches, tinned	,,	$\frac{10}{3}$	2
Pears, tinned	77 *******	1	$\frac{2}{1}$
Peas, tinned	22	$\frac{1}{2}$	2
Pepper	,,	9	2 2
Peppermint eordial	,,	2	
Pickles	,,	29	15
Pineapple, tinned		3	
Pineapple drinks, cordials, etc		8	1
Plums, tinned	,,	2	• • •
Potato and marrow	,	1	•••
Prunes with mock rice, canned	77	$\begin{array}{c c} 1 \\ 1 \end{array}$	•••
Punch cordial)) · · · · · · · · · · · · · · · · · ·	1	•••
Raspberries, tinned	,,	1	•••
Raspberry drinks, cordials, etc.	,,	5	
Ration, army	,,	3	$\bar{3}$
Refrigerator shelving	,,	1	1
Sarsaparilla cordials, drinks, etc.	,,	3	• • •
Smoking cure	,,	1	•••
Soap	27	6	3
Soda squash	22	$\frac{1}{2}$	1
Spirits	,,	$\frac{2}{169}$	10
,,	Metropolitan Licensing Inspectors.	1	10
Strawberry flavoured cordial	Food Inspectors	1	
Summer or temperance drink	,,	1	***
Sun tan solution		1	
Tarry matter	Municipal Inspectors	$\frac{2}{2}$	
Tea	Food Inspectors	7	•••
Tomato sauce Tomato juice	,,	4	1
Vanilla essence	99	4	•••
Vegetables, strained, tinned	,,	2 2	•••
Vinegar, malt	,,	8	•••
Walnuts, shelled	,,	1	
Water	39	î	
Wheat germ	,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,	î	
Wine	,,	14	5
	Total	24,495	1,391

Table II.—Samples examined during the year 1950 for the Public Services of the State.

Subsidised Institutions		
	Blood Cerebrospinal fluid Clothing Faeces Fruit juice Hair, human Herb infusion Magnesium trisilicate Meat, fresh Medicine Milk, powdered Milk, human Nalls, human Skin, human Stoap Stomach contents Tablets Urine Vomit Water	1 1 1 2 20 1 175 1 138 14 10 10 154 3
Government Stores Department	Acetic acid Acetone. Alcohol, absolute. Ammonium acetate solution Ammonium bromide Ammonium carbonate Ammonium chloride Ammonium sulplate A.P.C. tablets A.P.C. powders Arsenical solution Ascorbic acid tablets Barbitone tablets Barium sulphate Belladonna, tincture of Belladonna, concentrated tincture of Benzoic acid. Caffeine, pure	1 1 3 17 2 1 2 4 4 2 1 4 2 3 6 1 1 3

Authority Submitting.	Nature of Sample.	Number of	Authority Submitting.	Nature of Sample.	Number of
	<u>.</u>	Samples.	in the state of th	mode of sample.	Samples.
		<u> </u>	1		1
	Brought forward	417		Brought forward	700
	Caffeine citrate	1		Theobronine and phenobarbitone	1
	Calcium chloride Calcium lactate tablets	2 2		The obromine and sodium salicylate Trinitrin tablets	1 2
	Calomel tablets	3		Turpentine, oil of	1
	Cascara sagrada tablets	$\frac{2}{3}$		Vegetable laxative tablets	1
	Chalk, prepared	4		Vitamin B1 tablets	1 8 1 3
	Chalk, precipitated	$\frac{2}{1}$		Waterproof sheeting	1 3
	Chloroform	6		Zine sulphate	3
t.	Cleansers	11	Police Department	Criminal Investigations	231
	Cloves, oll of	$\frac{1}{3}$		Coronial inquiries (human viscera, blood, etc.).	772
	Colocynth, compound tablets of	1		Animal viscera	4
	Custard powder	$\begin{vmatrix} 2 \\ 1 \end{vmatrix}$	Municipal and Departmental	Water	367
	Disinfectants Dover tablets	39	Authorities.	Sewage	94
	Ephedrine hydrochloride tablets	$\frac{1}{2}$	Industrial Hygiene Authorities	Air	74
	Ephedrine and phenobarbltone tablets.			Benzenc Blood	1
	Ergot and strychnine tablets	2		Cosmetic pencil	1 1
	Ergot, liquid extract of Ether, anaesthetic	$\begin{bmatrix} 2\\2\\2\\1 \end{bmatrix}$		Dust	66
	Fehlings solution No. 2			Hair, human	8
	Ferricperchloride, strong solution of Ferrous sulphate	11		Insulation board	5
	Gelsemlum, concentrated tincture of	1		Lung, human	5
	Glycerine and borax	\sim 2		Motor spirit	l 8
	Hydrochloric acid	1		Paint Paint thinners	9
	Ink powder	2		Phosphores	9
	Insecticides	$\frac{2}{1}$		Polish, French Polishing rouge	$\begin{array}{c} 2 \\ 2 \\ 1 \end{array}$
	Ipecacuanha, tincture of	3		Powder, rcd	ī
	Junket tablets Lactic acid	1		Rubber cement	
	Liquorice, liquid extract Liquorice, compound powder	1		Solvents	4
	Lubricants	3		Welding rod	
	Magnesium carbonate, heavy Magnesium carbonate, light	6	Miscellaneous Authorities	Apples, fresh	1
	Magnesium sulphate	1		Blood	16
	Mercuric iodide Methyl alcohol	1		BreadButter	
	Morphine hydrochloride	1 1		Cake	1
	Opinm, concentrated camphorated			Cod liver oil	4
	tincture of. Opium, tincture of	2		Cotton wool Crumpets	$\frac{1}{2}$
	Paraldchyde	6		Disinfectants	1 2 2 6 1
	PhenacetinPhenacetin tablets	2		DustFish sandwich	
	Phenazone Phenobarbital tablets			Flock Flour, plain	$egin{array}{c} 40 \ 1 \end{array}$
	Phenobarbital, soluble	3		Flour, self raising	15
	Phenolphthalein, compound tablets Phosphoric acid	2		Friars balsam	$\frac{1}{12}$
	Potassium bicarbonate	1		Honey	
	Potassium chlorate	3		InsecticidesLubricants	26
	Potassium nitrate Potassium sulphate	5		Meat Medicine	
	Q.E.S. tablets	6		Milk container, aluminium	1
	Quinine sulphate Resorcin	$\begin{vmatrix} 2 \\ 1 \end{vmatrix}$		Milk, fresh Milk, human	$\frac{1}{3}$
	Rhubarb root, powdered	1		Nails, humau	9
	Saccharln tablets	$\begin{bmatrix} 2 \\ 1 \end{bmatrix}$		Olive oilPaint	3
	Santonin and caloncl tablets Soap	1		Paraffin laxative	1
	Sodium benzoate	1		Sausages	2
	Sodium chloride Sodium iodide	4		Sausage casing Semolina	
	Sodium nitrate	1		Tablets, charcoal	1
	Sodium nitrite	1 - 2		Tea Urine	27
	Sodium sulphate			Viscera, animal	1
	Sodium thiosulphate crystals Sodium and potassium tartrate	1		Wheat glutch	
	Squill vinegar	2	Department of the Army	Baking powder	$\frac{2}{1}$
	Sulphanilamide powder	1		Linseed oil	4
	Sulphanilamide tablets	1		Sausages Pepper	
	Theobromine, compound tablets	2		Total	
	Carried forward	700		10001	2,000

PURE FOOD ACT, 1908-1944.

Report of the Chief Inspector on the General Administration of the Pure Food Act, 1908-1944, for the year ended 31st December, 1950.

Staff.

Chief Inspector: PHILLIP C. WILLIAMS, M.R.San.I. One deputy chief inspector; one senior inspector—Newcastle; ten metropolitan inspectors; two country inspectors.

I herewith submit particulars of the work performed by the Pure Food Branch for the year ended 31st December, 1950.

This work includes the supervision of all places where food or drugs are prepared, stored or exposed for sale, together with the incidental duties required to be carried out in order to secure the wholesomeness, cleanliness and freedom from eontamination of food and drugs, and compliance with the legal provisions as set out in the Act and Regulations thereunder.

Milk.

Six thousand four hundred and twenty samples of milk were purehased for analysis by departmental officers and 2,635 by local authorities, making a total of 9,718 for the year. Two hundred and ninety-eight were not in accordance with the standard, fifty-nine warnings were issued, and 239 traders were prosecuted. The fines and costs imposed amounted to £934 18s.

Bread.

Special attention has been paid to the method of delivery as well as the quality of bread. Three hundred and sixty-three samples were taken for analysis, sixty-two warnings were issued, and twenty-four traders were prosecuted.

In connection with the delivery of bread eighteen prosecutions were issued for exposing bread to contamination. The total fines and costs being £115 11s.

Meat.

Five thousand six hundred and seventy-two samples were taken for analysis. Fifty-eight warnings were issued, and 257 traders were prosecuted and £1,271 11s. 6d. was collected in fines and costs.

Beer, Wine and Spirits.

Two hundred and fifty-two samples were submitted for analysis. There were four warnings, nine prosecutions, and £19 1s. collected in fines and costs.

Hotels were regularly inspected, and one prosecution was launched for failure to use colouring matter in beer driptrays; £3 10s. was collected in fines and costs.

Cordials.

Two hundred and twenty-six samples were taken for analysis, fourteen warnings were issued and eighteen prosecutions were lauuehed, and fines and costs amounting to £51 5s. were collected.

Poultry.

The arrangement with the poultry selling agents at the Municipal Poultry Markets, by which poultry is examined, resulted during the year in the seizure and destruction of 15,312 head of poultry as unfit for human eonsumption. It is possible that many of these birds would have found their way to certain food channals, but for the action taken.

Seizure and Destruction of Food.

During the year it was found necessary to seize a large quantity of foodstuffs. The seizure comprised 30 tons of assorted food and drugs, also 92,685 tins, 6,097 packets, and 838 bottles.

General Breaches of the Act and Regulations.

Breaches included poisonous substances in food containers, unclean food appliances, unclean vehicle, smoking on food premises, earrying water on a milk eart, bread wrapped in newspaper, failure to keep premises free from rats, flies, cockroaches, mice, animals, etc.

In addition, 11,845 premises were inspected resulting in 100 prosecutions being launched and £578 11s. collected as fines and costs.

Medical Practitioners Act, etc.

Special work has been earried out under the Medical Practitioners, Dental and Optometrists Aets.

Survey in regard to the Bacteriological Condition of Eating and Drinking Utensils.

Last year the Department inaugurated a special foodbondling campaign which was aimed at improving the stand-

ards of hygiene and cleanliness in restaurants, hotels and cafes, especially in regard to the cleansing of eating and drinking utensils.

A special film was produced, cards were displayed in trams and posters on hoardings, and a special folder on proper methods for eleansing eating and drinking utensils was printed for distribution to proprietors of eating and drinking establishments.

It is now proposed to launch an educational drive by conducting special meetings in various centres where lectures supplemented by screening of selected films can be shown to proprietors of eating establishments.

Staff

The establishment of the Braneh provides for a staff of fourteeu inspectors. This establishment existed in 1920 when the population of the State was 2,225,242. During the intervening thirty years the population has increased by 1,134,127 and now in 1950 stands at 3,225,242, i.e., an increase of approximately 60 per cent. This means that to police the provisions of the Pure Food Act effectively, the staff should be increased by at least eight units.

Attached is a summary of the number of samples taken during the year, foodstuffs destroyed, inspections made, prosecutions launched with fines and costs imposed.

Summary of Work performed by Pure Food Officers during the year ended 31st December, 1950.

TABLE I.

Samples

330

Samples of Milk.	Samples taken by Department- al Officers.	taken by Municipal and Shire Council Inspectors.	Total.
Number of samples taken from all parts of the State Number of samples below standard Number of warnings Number of prosecutions Amount of fines and eosts	6,420 213 40 173 £ s. d. 661 11 0	2,635 85 19 66 £ s. d. 273 7 0	9,055 298 59 239 £ s. d. 934 18 0
Food and Drugs other than M		of the State	Total.

£ s. d. 1,600 19 6

Number of Prosecutions

Food unfit for consumption seized and destroyed—

The seizures comprised over 30 tons of assorted food and drugs, also 92,685 tins, 6,097 packets and 838 bottles of assorted food. 15,312 head of poultry were destroyed as being unfit for the food of man

unfit for the food of man.

Inspection of premises used for the preparation, salo and storage of food—

Number of premises inspected in all parts of the State 11,845

Number of prosecutions 18

£ s. d.

Amount of fines and costs 210 11 0

General Breaches of the Act and Regulations—

Number of Prosecutions 82

£ s. d.

Amount of fines and costs 368 0 0

TABLE II.

Summary of Legal Proceedings by Officers of the Pure Food Branch during the year ended 31st December, 1950.

	Prosecutions.	Fines and Costs.
Adulterated milk	173 327 18 82	£ s. d. 661 11 0 1,590 19 6 210 11 0 368 0 0

TABLE III.

Summary of Work earried out by Pure Food Officers under the Pure Food Act 1908–44 from the Date of its Operation October, 1909, to 31st December, 1950.

	Prosecutions. Fines an Costs.		
Number of premises inspected (377,622)	2,723 2,450 6,985 8,312 430 20,900	£ s. d. 14,475 19 6 8,172 12 0 28,857 13 0 25,164 3 2 1,870 7 0 78,540 14 8	

General Breaches of Pure Food Act and Regulations.

Particulars of Prosecutions.

Offence,	No.	Fines and Costs.
Smoking on food premises or during the handling of food for sale Did sell unlabelled oysters Did expose bread and other food to contamination Did expose meat to flies and dust Failure to use colouring matter in beer drip trays Failure to keep premises free from rats Failure to keep premises free from flies Failure to keep premises free from cockroaches Failure to keep premises free from mice Failure to keep premises free from dogs Did use unclean food appliances Unclean bread trough Poisonous substances packed in food containers Unclean vehicle used for carriage of food Unclean flour sifters Unclean refrigerator Bread wrapped in newspaper Did carry water on milk-cart Did sell adulterated poultry Did sell adulterated chocolates	13 16 18 1 1 1 2 2 1 3 5 1 2 1 5 1 4 1 2 2	£ s. d. 52 15 0 43 10 0 49 10 0 3 13 0 3 10 0 20 10 0 17 0 0 7 1 0 11 0 0 18 11 0 25 10 0 26 0 0 10 10 0 13 19 0 4 0 0 7 10 0 4 10 0 15 10 0 21 0 0
Total	82	368 0 0

FOOD AND DRUG SAMPLES.

Particulars of Samples of Food (other than Milk) and Drugs taken for Analyses by Departmental Officers during the year 1950.

Sample,	No. of Samples.	Warn- ings.	Prosecu- tions.	Fines and Costs.
Baking powder Beer Butter Bread Cream Coffee and chlcory Cheese Confectlonery Condiments Cordials Drugs Disinfectants Essences Fruit, preserved Fish Flour General Honey Ice cream Jam Margarine Malt Meat Spirits, wines Soap Sugar Trea Vlnegar Vegetables Oils, edible	5 70 33 363 127 17 2 2 3 226 5 12 25 14 138 4 54 32 9 1 5,672 182 6 6 7 7 10 10 11 11 12 13 14 15 16 16 16 16 16 16 16 16 16 16	3 62 3 3 14 4 4 58 4	1 24 3 1 2 1 18 2 4 7 257 6	£ s. d. 3 10 0 2 10 0 66 1 0 24 0 0 5 15 0 21 0 0 51 1 0 36 0 0 16 0 0 12 10 0 13 0 0 59 0 0 1,271 11 6 19 1 0
Total	7,040	159	330	1,600 19 6

Seizures.

Particulars of food seized as unfit for human consumption and destroyed by Officers under the Pure Food Act during the period 1st January to 31st December, 1950.

Artiele.	Tins.	Packets.	Bottles.	We	ight	
A 1 . C . 3	0.700			t.	e.	q.
Assorted foods	9,109	32	73	27	10	4
Condiments			580			
Confectionery		2,250		0	2	0
Cheese		458				
Cordials	24			•••	• • • •	
Drugs		441	• • •	• • •	• • • •	
Enuit processed			•••		• • • •	_
Fruit, preserved	54	218	***	2	-	5
Fish	77,974	646	•	0	5	1
Flour		80	• • •			
Jam	4,090		81			
Meat	46			0	1	0
Nuts		20		ŏ	_	0
Poultry (15,312 head)	•••				9	U
1 outry (15,512 fleata)	•••	•••	•••	• •	• • • •	
C		1.050				
Soup	• • •	1,872	•••			
Spirits	• • •	• • •	104			
Vegetables	1,388			0	3	1
4 1 1 2 0 00 1		-				

A total of 30 tons 14 ewt. of assorted food and drugs; 92,685 tins, 6,097 packets and 838 bottles of the same and 15,312 head of poultry.

Inspections.

Inspections in Country Districts during 1950 by Officers of the Pure Food Branch.

I die I old Dittilon.	
District.	No. of Inspections
Albury	59
Armidale	8
Barraba Bathurst	$\frac{9}{22}$
Bellingen	$\frac{22}{23}$
Berrigan	$\frac{5}{26}$
Blue Mountains	28
Bombala	8
Broken Hill	17 8
Casino	12
Coolah	11
Coonamble	15
Coonabarabran Cowra	$\begin{array}{c} 12 \\ 29 \end{array}$
Culeairn	$\frac{29}{22}$
Dorrigo	5
Dubbo	13
Dungog	5
Forbes Gilgandra	$\begin{array}{c} 19 \\ 12 \end{array}$
Grafton	18
Gulgong	28
Gundagai	13
Guyra Holbrook	14 8
Inverell	33
Kearsley	30
Kiama	13
Lake Macquarie	69
Lecton Lithgow	$\frac{4}{24}$
Lower Hunter	7
Lyndhurst	17
Maeleay	1
Maitland Manilla	56 9
Molong	7
Mudgee	6
Murrumburrah	19
Muswellbrook	$\begin{array}{c} 53 \\ 40 \end{array}$
Nambueea Neweastle	$\frac{40}{377}$
Oberon	5
Orange	39
Parkes	17
Peel	$\frac{8}{2}$
Queanbeyan	$1\overline{2}$
Seone	27
Shoalhaven	19
Singleton Tamworth	$\begin{array}{c c} 23 \\ 78 \end{array}$
Taree	16
Temora	17
Tumut	23
Uralla Wade	11 11
Wagga	29
Wollongong	53
West Wyalong	24
Yass	17
Total Inspections— Country	1,640
Country Metropolitan	10,205
Grand Total	11,845
Prosecutions for dirty premises, 18.	

Prosecutions for dirty premises, 18. Amount of fines and costs, £210 11s.

ANNUAL REPORT OF THE ACTIVITIES OF THE HEALTH INSPECTION BRANCH DURING THE YEAR ENDED 31st DECEMBER, 1950.

Staff.

Chief Health Inspector, G. A. Garrow, M.R.San.I., T.P. Cert. Deputy Chief Health Inspector, K. R. Horne.

Ten health inspectors.

Two surveyors.

One female tracer,

One junior clerk.

During the year a senior female tracer was appointed to this Branch to assist with the greatly increased volume of plan, search and other work relating to land notified as unhealthy building land under section 55, Public Health Act, 1902-1944. She commenced duty on 14th August, 1950.

Country and Metropolitan Districts—Routine and General Inspections, etc.

Towns.—A total of ninety-one inspections were made—thirty-six primary and fifty-five re-inspections.

Insanitary Buildings.—Forty-two building were inspected and the respective local authorities were requested to eause necessary repairs or alterations to be earried out.

Shortage of housing accommodation made it inadvisable to recommend the issue of Closing Orders in other than extreme cases, therefore only one Closing Order Certificate was recommended.

Guest and Boarding Houses.—Sixty were inspected and suitable action recommended where found necessary.

Shop Premises.—Nine hundred and forty-eight were ininspected and appropriate action taken.

Hospitals, Institutions and Schools.—Inspections were made of 134 separate premises, and necessary action recommended.

Public Halls and Theatres.—One hundred and nine inspections were made and sixteen air tests were earried out in eonjunction with an officer from the Division of Industrial Hygiene.

Hotel Premises.—One hundred and fifty-eight were inspected and reports and recommendations were forwarded to the controlling authority for necessary action.

Swimming Pools.—Three inspections of swimming pools and treatment plants were made and reports furnished thereon.

Cattle Slaughtering Premises and Abattoirs.—Twenty-six inspections of slaughtering premises and fourteen inspections of abattoirs were made and appropriate action taken.

Noxious Trades.—Seven hundred and fourteen inspections and re-inspections of Noxious Trades premises were made and where found necessary, repairs, etc., were required to be carried out.

In one instance, legal proceedings were instituted against a trader.

The provisions of the Noxious Trades Act were extended to the Municipality of Deniliquin.

Removal of Dead Stock from Flemington.—Thirteen thousand four hundred and seventy dead animals were removed from Flemington Sale and Trucking Yards and the Abattoir by a private firm to its knackery premises and in no case were complaints received in this office respecting these activities.

Flock and Bedding Material.—Thirty-four samples of flock and bedding material were obtained and three mattresses and pillows were purchased for examination.

Seventy-two premises were inspected and suitable action taken where found necessary.

Camps, Showgrounds, Cemeteries, etc.—Forty-three inspections were made and where necessary, suitable action was recommended.

Saleyards and Proposed Sites.—Five inspections were made of saleyards and suitable action recommended. One inspection was made of a site for a proposed saleyard.

—Seavenging Districts, Sanitary Depots: Proposed Sites and Garbage Incinerators.—Twenty-five descriptions and plans of proposed scavenging districts were examined, and a number of these were amended or re-east in this office.

One hundred and twenty-seven inspections of sanitary depots were made and, where found necessary, suitable action was taken. Sixteen proposed sites for sanitary depots and two proposed sites for garbage incinerators were inspected, and those found unsuitable were not recommended.

Approval to bury nightsoil in ploughed furrows was recommended in two instances.

Sanitary Services.—Three investigations of sanitary services were made and when warranted, suitable action was taken.

Septie Tanks, Sewage Treatment Works, Private and Public Water Supplies.—Two thousand five hundred and sixty-two plans of proposed septic tanks were examined and reported upon and, where found necessary, were either amended, or not recommended for approval. Two thousand three hundred and forty-nine proposed sites were inspected and a number were found unsuitable, in consequence of which approval to instal the septie tank could not be recommended.

One hundred and twenty-eight existing septie tanks and sewage treatment works, including effluent disposal areas were inspected and suitable action recommended where found necessary.

Two samples of effluent were collected for examination.

Five inspections were made of public and private water supplies, and thirty samples of water were procured for examination.

Four investigations were made respecting the source and storage of water supplies.

Suitable action was recommended where found necessary.

Councils Required to Appoint Health Inspectors.—Eleven Local Government Councils were requested to appoint certificated health inspectors, following investigations of their respective areas. None of these councils appointed such inspectors during 1950.

Unhealthy Building Land.—One hundred and fifty-three surveys and 408 inspections and cheek surveys were made of land considered unfit for building purposes.

Thirty thousand three hundred and nineteen inquiries were made by solicitors and others, and these were revenue producing to the extent of £5,307 7s. 6d.; of these a fee of 2s. 6d. was charged for 20,179 inquiries and 5s. for 10,140 inquiries.

The fee increase from 2s. 6d. to 5s. was charged from 1st September, 1950.

This work has greatly increased during the past three years, as will be seen from the following figures:—

	1119	uiries
1948	1	6.168
1949	2	
1950	3	
		σ_{σ}

Twenty-four plans of notified areas were re-drawn and one new plan for a proposed area was complied. Ten other plans were drawn and twenty special articles were printed by the female tracer employed in this office since August, 1950.

In addition, searches were made and plans prepared from plans and data at the Registrar-General's office in connection with inquiries made by solicitors relating to notified land.

Certain lands in the municipality of Bankstown and the shire of Shoalhaven were notified as unfit for building purposes, by notice in the *Government Gazette*.

Surveys are being effected, and plans, specifications and notices are being prepared of several areas of land in various parts of the State and which are considered unfit for building purposes.

Owing to the enormous increase in survey work and the preparation of plans, etc., connected therewith, a number of applications from local councils respecting land situated in their respective areas cannot yet be attended to.

Rat Infestation.—One thousand six hundred and eighty-seven rats were trapped. These rats were examined in the microbiological laboratory and were found free from plague.

Twenty-two investigations were made respecting alleged rat infestation and where found necessary, suitable action was taken.

Sydney Wharves.—Ninety-two visits were made of the wharves, and the controlling authorities notified where repairs, eradication of rats, etc., were considered necessary.

Re-inspection of the premises disclosed that the work required has been, or is being earried out.

Nuisances.—Forty-five investigations of complaints respecting drainage, pollution of water courses, and other alleged nuisances were made following which action considered necessary was recommended.

Sorting of Dead Wool.—Five visits were made to premises in which this process was carried on, and where considered necessary, advice was given.

Samples of Water, Effluent, Air and Soil.—Seventy-seven samples were collected for chemical analysis and microbiological examinations, on results of which, suitable action was recommended.

Dairies Supervision Act.—No applications were received during the year from shire councils to be proclaimed local authority under this Act.

Legal Proceedings.—Fourteen prosecutions were instituted for breaches of various Acts, Regulations and Ordinances, and fines and costs amounting to £102 12s. were imposed.

In one instance, an appeal by the applicant was successful.

Departmental officers appeared as witnesses in eleven prose-

cutions instituted by councils at the request of this Department.

Investigations on Behalf of the Dental Board.—Seven investigations were made on behalf of the Dental Board, in

connection with alleged illegal practice, and reports thereon were submitted to that Board.

Baby Health Centres.—Four baby health centres were inspected, and suitable action was recommended where necessary.

Aborigine Reserves.—Four aborigine reserves were inspected and appropriate action recommended.

Knackers.—Forty inspections were made and where found necessary, suitable action was recommended.

Committees.—An officer of this Branch represents the Department on the following committees:—

Building Regulations Advisory.

Cyanide Examination.

Country Abattoir Sites, Standards Association.

Application for Cyanide Fumigation Operator's License.— One candidate presented himself for the required examination and was recommended.

PRIVATE HOSPITALS ACT, 1908.

Report on the operation of the above Act for the year ending 31st December, 1950, by A. J. Hope, M.B., Ch.M.

There were remaining at the end of this period 229 licensed private hospitals representing a loss for the year of 33, having a total bed capacity of 3,234, a loss of 254. Of these 229 hospitals, 125 were in the metropolitan area and 104 in the country, a loss in each place of 14 and 19 respectively.

As has been the case in previous years, the loss affected those which catered for medical, surgical and lying-in and those for lying-in only; the figure for medical and surgical hospitals was the same as that of last year, seventy-eight.

All relevant information is shown on the following Table 1.

	Hospitals.							١.
Medical, Surgical, Lying-In. Medical and Surgical. Lying-In.					Medical, Surgical, Lying-In.	Medical and Surgical.	Lying-In.	Total.
Sydney	35	60	30	125	1,024	1,238	183	2,445
Country	56	18	30	104	437	196	156	789
Total	91	78	60	229	1,461	1,434	339	3,234
Variation with percentage.	Loss 18 16·5%	None	Loss 15 20%	Loss 33 12.6%	Loss 205 12·3%	Gain 34 2·4%	Loss 83 19·6%	Loss 254 7·2%

Supervision by the Department has been fully maintained but implementation of requests for improvements and renovations has been greatly delayed by licensees for the usual reasons of shortage of labour and materials.

Overcrowding as always, remains the most frequent infringement of the clauses of the Private Hospitals Act about which very little corrective action may be taken, for the obvious reason of public hardship caused by diminishing accommodation.

No hospital controlled by the Bush Nursing Association and Country Women's Association has closed permanently during the year.

Table II.—Showing classification of Private Hospitals licensed at 31st December with respect to size as signified by Number of Beds available.

Beds.	1.	2.	3.	4-5.	6-10.	11-20.	Over 20.	Total.
Metropolitan	2	5	5	9	38	35	31	125
Country	9	10	8	18	32	22	5	104
Total	11	15	13	27	70	57	36	229

As has always been the case, over the last few years, those hospitals which are licensed to receive six to twenty and over patients easily outnumber the other types; they number 163 or 71 per cent.

T'ABLE III.—Showing general decline in numbers of different types of hospitals (private) in the five-year period, 31st December, 1945, to 31st December, 1950.

	Total Hos- pitals.	Total Beds.	Medical and Surgical and Lying-In.	Surgical.	Lying- In.	1 Bed.	2 Beds.	3 Beds.	4–5 Beds.	6–10 Beds.	11–20 Beds.	Over 20 Beds.
1945	364	4,106	178	52	134	17	25	35	50	112	84	41
1950	229	3,234	91	78	60	11	15	13	27	70	57	36
Decrease	135	872	87	26	74	6	10	22	23	42	47	5
Percentage— Decrease Increase	37	21.2	49		55.2	35.3	40	63	46	37.5	32·1	12.2

The only type of hospital showing an increase is that which is licensed to admit medical and surgical cases only.

MEDICO-LEGAL SECTION, ETC.

Report of the Government Medical Officer for Sydney for the year ended 31st December, 1950.

Medical Staff.

Dr. C. E. Percy, Government Medical Officer for Sydney. Dr. S. H. Hankins, Medical Officer.

Dr. W. H. N. Randall, Medical Officer.

Hospital Admission Depot.

Assistants—three.
Night Officer—one.

Medical Work.

Admissions to Hospitals and Homes.—Three thousand, one hundred and sixty-two persons were admitted through the depot to metropolitan hospitals, 6,111 to State hospitals and homes, and 944 to convalescent homes. Admissions of country residents to metropolitan and base hospitals were also arranged. Ambulance removals arranged by the depot totalled 10,822.

Medical Examinations for State Government Departments.— Two thousand, five hundred and eighty-two were performed, some persons being visited in their own homes.

Medical Examinations of Police Recruits, etc.—One thousand and thirty-six recruits (probationary constables and police cadets) were examined (315 of these were re-examined at a later date), 388 probationary constables were examined after twelve months' service and 166 police cadets were given periodical examinations during the year.

Medical Examination of Sick Police.—Matters concerning the health of the Police Force are dealt with. The average daily number of police on sick report was ninety-two.

Medico-Legal Work.

Examinations of Alleged Rape and Criminal Assault Cases.— Ninety-five examinations were made, exhibits connected with such cases were examined, and evidence was given at various courts.

Work for the Coroner's Court.—The Government Medical Officer performed post-mortem examinations at the City Morgue in connection with suicides, homicides, violent and uncertified deaths.

Lunaey Work.—The Reception House at Darlinghurst is visited daily—1,573 cases were certified as insane.

Vaccinations against Smallpox.—One thousand, two hundred and fifty-nine vaccinations were performed for the Police Force and the general public, and an additional 493 International Certificates were issued confirming vaccinations by other practitioners.

Throat Swabbings.—Three hundred and seventy-eight swabbings were taken in cases of children being admitted to various homes.

Annual Report of the Government Medical Officer, Newcastle, for Year Ending 31st December, 1950.

Staff.

Dr. C. W. England-Government Medical Officer.

Medical Work.

- 1. Examination of persons for appointment to and fitness to continue in the Public Service for State Government Departments, and also for various allied bodies, 216.
- 2. Examinations of returned soldier applicants for travelling concessions, 117.
- 3. Examination of persons for Child Welfare Department, allowances, etc., 2.
- 4. Attendances at the Reception House, Newcastle, in connection with the examination and certification of insane patients, 232.
- 5. The G.M.O. is a Medical Referee and Member of the local Medical Board for the Workers' Compensation Commission, 32.

Medico-Legal Work.

- 1. The performance of autopsies at the request of the District Coroner in cases of homicide, suicide and violent and uncertified deaths, 256.
- 2. The examination of persons at the request of the Police Department in cases of rape, assault, etc., 18.
- 3. Attendance at various courts and the giving of evidence in connection with any of the above cases.

HEALTH EDUCATION AND PROPAGANDA.

Annual Report of the Publicity Officer for 1950.

The amount of money made available for health education purposes in 1950 was £10,000, an advance of £1,100 on the previous year, but still far below the record Vote of £32,000 in 1946-47. In consequence the Department's activities in this field were severely restricted. It was not possible to resume paid press and radio advertising, whilst rising costs meant that the Department had to pay two or three times more for the production of publicity material than it did in 1946. Hence the £10,000 voted for 1950 only went as far as a considerably smaller sum, say £4,000, in 1946.

Press Advertising.

Although the Department has not engaged in paid press advertising since 1947, it was successful in inducing a large number of country and suburban papers to print press articles issued at regular intervals by the Publicity Branch. On the occasion of Health Week in October, all city dailies devoted considerable space to special articles and features which were prepared in collaboration with departmental officers.

Broadcasting.

An inadequate vote again prohibited paid radio advertising. However, participation in the 1st National Health Week Campaign gave the Department an opportunity to secure free radio time which, if valued at commercial rates, would have been worth many thousands of pounds. Both commercial and national stations broadcast scripts, recorded talks and scatters

supplied by the Department and departmental officers gave special talks. The quality of the material was apparently very acceptable because most stations continue to broadcast scripts and other matter supplied by the Department.

Poliomyelitis Publicity Campaign.

A publicity campaign launched in December, 1949, was continued throughout 1950. Articles were issued at frequent intervals to the press, pamphlets were distributed through municipal and shire councils, and an instructional film for professional audiences—"Poliomyelitis: Diagnosis and Treatment"—was circulated throughout the State.

Food Handling Campaign.

An attempt was made during the year to improve the standards of hygiene in hotels, restaurants, etc. Pure Food and Health Inspectors, and members of the various trade associations (both employer and employee co-operated in an endeavour to eliminate certain unsatisfactory conditions, particularly in connection with the washing and cleansing of used utensils. Publicity material prepared, distributed or displayed included a 24-sheet poster; 7 small posters for display in kitchens; a 35 mm. film, with both 35 mm. and 16 mm. prints, for theatre release and screenings to smaller audiences; a folder containing information on correct washing-up methods; press and radio items on the subject. Lectures and film screenings were given to specialised groups, and are still continuing.

Poster and Sticker Displays.

Health education of the public through this medium was continued on the same basis as mentioned in earlier reports, viz.: (a) the display of 24-sheet posters on 55 metropolitan and country sites, (b) the display of stickers in 350 selected positions in metropolitan electric trains, (c) the display of sets of posters in 300 glazed frames on suburban railway stations, and in city underground stations, (d) the display of 1,000 bulkhead and several hundred side-rack cards in Sydney trams, (c) the display of metal frames on V.D. in public lavatories.

This year, 24-sheet poster sites were mainly devoted to the display of posters on Venereal Disease, but were replaced late in the year by posters on food handling.

Health Exhibition, Sydney Town Hall, 24th-28th October.

The Department was once again a major exhibitor at this Exhibition which has become an annual function in Sydney. Two new exhibits were entered; one, an elaborate pictorial display of the work which the Department performs on behalf of the community; the other, a display designed to show the public what the State's mental hospitals really looked like, together with examples of the attractive handcrafts executed by patients. As usual, the Department conducted a special theatrette where health films were screened continuously 12 hours a day for 5 days. Over 132,000 people visited the Exhibition, and 14,000 people viewed the Department's film programmes.

Other Health Exhibits and Displays.

During the year most of the Department's window display units were out of action, and as a result only 28 displays were arranged in the Sydney area.

On the other hand the Department entered exhibits at Agriculture Shows at Rylstone, Mudgee, Gulgong, Orange and Wellington, and at the Health Exhibition at Casino. The nature of these exhibits has been outlined in previous reports. The interest shown in the Department's displays justified the efforts involved.

Health Week created considerable activity in municipat and shire areas, and the Department gave assistance to thirty metropolitan and thirty-eight country councils. Many of these councils staged full-scale health exhibitions of their own, Manly and Leichhardt being notable examples.

Publications and Posters.

During the year the following publications were printed:-

Title.	Number of Copies.
"Healthy Motherhood" (reprint) "Our Babies" (reprint) "Poliomyelitis" (new leaflet) "Throat Infection" (new leaflet) "Cleansing and Sanatising of Eating and Drinking	45,000 50,000 100,000 100,000
Utensils" (new folder) "Botulism" (reprint) "Normal Diet for Expectant Mother" (reprint) "Diet B—Low Salt Diet" (reprint) "Low Caloric Diet" (reprint)	15,000 15,000 10,500 8,500 8,500
"Salad Suggestions" (reprint)	2,000 2,000 10,000

In addition, requisitions were placed for the following:—
"Healthy Motherhood" (50,000 copies), "Diabetes" (15,000 copies) and "Poliomyelitis" (a further 20,000 copies).

The following posters, stickers and cards were printed:-

Title.	Number of Copies
"Dangerous Weapons" (24-sheeter)	250 1,000
Foodhandling Series, 13 in. x 10 in.— "Keep these Cold" "Keep these Under Cover". "Use a fork—don't be a butterfinger". "Handle with Care". "Wash Your Hands Often". "Wash Every Piece Carefully".	1,000 1,000 1,000 1,000 1,000 1,000
Bulkhead eards on foodhandling for tram display Side rack eards on foodhandling for tram display	3,680 2,000
"Sensible Living Helps Prevent T.B." (reprint)	4,000

Visual (Film) Education.

As will be seen from the following, the Department had another successful year in the use of films for educational purposes—

(1) Film Screenings.—Altogether, 193 separate programmes were screened to a total audience of 65,539, made up as follows:

- (2) Film Loans.—During the year 280 sixteen millimetre, and 98 thirty-five millimetre films were loaned to approved borrowers. Unfortunately, a record of audience figures was not maintained; such a record will be kept from 1951 onwards. A conservative estimate of the number of people who viewed loan films would be 30,000.
- (3) 35mm. Films Produced and Released.—Two new 35mm. films were completed during the year, viz., "Disturber of the Peace" (noise) and "Poison Unlimited" (food handling). Prints of another 35mm. film, "Pardon Me" (use of handkerchief when coughing) were acquired.

The Department continued to take advantage of its agreement with the Motion Pieture Industry for the free release of 35mm. films throughout the State. The release of "Public Enemy No. 1" (commenced last year) was completed, as were the releases of "Poison Unlimited" and "My Fight For Life" (T.B.).

(4) New Films.—Forty-nine additional 16mm. films (including twenty-four separate titles) and sixty-three 35mm. films (comprising three different titles) were acquired. The state of the Department's film libraries was as follows at 31st December, 1950—

16mm.—209 films (149 separate titles, fifty of which are available for free loan).

35mm.—226 films (thirty-one separate titles, all available for loan).

(5) New Film Equipment.—Two new projectors were acquired, making a total of four in the service of the Department. After many years, the Department has at last secured permanent accommodation in the building for preview purposes. A new film splicer, and other minor equipment was acquired.

C. NUTRITION.

REPORT ON THE ACTIVITIES OF THE NUTRITION SECTION FOR THE YEAR ENDED 31st DECEMBER, 1950.

Staff.

Dietitians—Three. Shorthand-typiste—One.

Miss June Harding was appointed to the staff and commenced duty 4th February, 1950.

Nutrition Education.

(a) Publicity Material.—Articles and radio scripts (400 to 500 words) are prepared every week for metropolitan and country newspapers and radio stations. Articles are sent to 397 newspapers. A weekly marketing bulletin on fruit and vegetable prices is supplied to all metropolitan commercial radio stations.

Special articles dealing with food values and items of particular interest have been prepared on request for newspapers and periodicals.

Special radio scripts dealing with relative food values and prices were prepared and broadcast at various times from stations 2GB and 2UE.

A new radio series, "Nutrition Question Box" was begun in the form of a question and answer broadcast each week in the 2GB Women's Session.

Roncoed leaflets, "Money Saving Main Dishes" and "Salad Suggestions" were revised and re-issued.

The "Sally Stringbag" feature continued until the "Home Magazine" ceased publication.

Assistance was given in setting up and staffing exhibits arranged by the Division of Maternal and Baby Welfare and the Diabetic Association at the Annual Health Week Exhibition at the Town Hall. Assistance was given with the organisation of the Health Week Luncheon.

(b) Enquiries.—Large numbers of enquiries dealing with food values, relative values and costs, and methods of cooking are dealt with by telephone, letter and interview.

Detailed individual diets are supplied to enquirers prescribed special diets by their own physicians.

(c) Lectures.—Talks on nutrition and food values, costs, children's meals are given to various groups such as Parents and Citizens' Associations, Mothers' Clubs, Church groups and Junior Farmers' Clubs. Talks and practical demonstrations are given at the Annual Conference of the Agricultural Bureau at Hawkesbury College and to branches of the Bureau in country districts.

Series of lectures are given to trainee teachers at the Sydney Kindergarten Training College and the Sydney Day Nursery and Nursery Schools' Association and to members of Voluntary Aid Detachments.

Talks and demonstrations were given at two St. George County Council Demonstration Kitchens in connection with Health Week. Talks were given to various groups in Newcastle during the Newcastle Health Week.

(d) Pre-natal Clinics.—Regular weekly attendance at Parramatta, Manly and Hurstivlle Clinics was maintained and Liverpool, Campsie, Dee Why and Hornsby Clinics were also attended each week. Advice on normal and special diets is given under the direction of the Medical Officer. The diet instruction sheets have been translated into various languages (Estonian, Polish, German, Lithuanian, Czechish, Latvian, Serbian) to assist New Australians attending the clinics.

Institution Food Services.

A dictitian gave part-time assistance to the Randwick Auxiliary Hospital until the end of March when a full-time catering officer was appointed to the Hospital.

The food service at Waterfall Sanatorium was inspected with the Supervisor of Catering and a report prepared.

In co-operation with the Supervisor of Catering revised sketch plans for the renovation of the kitchen at Parramatta Mental Hospital were examined and reported on and advice given regarding food service at that hospital.

Other Activities.

New South Wales State Nutrition Committee.—The executive and secretarial work of this Committee has been done.

School (Oslo) Lunch Advisory Committee.—A dietitian has acted as representative of the Health Department on this Committee; advice and talks have been given to groups preparing to organise canteens in schools.

New South Wales Institute of Dietitians.—The executive and secretarial work of this body has been done within the section.

Liaison with other Government Departments.—Advice and information on specific dietary problems and planning menus for homes and holiday camps has been given to the Child Welfare Department and the Aborigines Welfare Board.

In collaboration with Dr. Cuthbert, menus and recipes for feeding children in Migrant Camps were prepared for the Department of Labour and National Service and checked in the test kitchen in Melbourne.

Assistance was given to the Commonwealth Office of Education in the preparation of posters for discussion groups and for the education of New Australians.

Committee to Fix Standards for Evaluating Bread.—A dietitian acted as representative of the Health Department on this Committee set up by the Minister for Labour and Industry and Social Welfare.

Broken Hill.—A dietitian spent a period in Broken Hill and the North West corner of New South Wales enquiring into food supplies and problems in that area and a report was prepared.

Traince Dictitians.—The work of the trainee dictitians is supervised during University vacations.

D. DIVISION OF MATERNAL AND BABY WELFARE.

PART I-MATERNAL WELFARE.

Scheme for the Reduction of Maternal Mortality.

Pre-natal clinics.—Ten clinics are now conducted at baby health centres in the metropolitan area. Their distribution is planned to provide services on all lines of transport, viz., Liverpool and Parramatta on the west, Campsie on the Bankstown line, Beverley Hills on the East Hills line, Hurstville on the south, Hornsby on the North Shore line, Manly, Harbord and Dee Why on the north-east, and Mascot in the south-east area.

The total attendances for the year 1950 were 17,771, an increase of 6,048 on the previous year. Four medical officers of this Division undertake the medical supervision at these clinics.

Careful check is maintained on the attendances to observe average maximum caseload, thirty-five per morning and thirty per afternoon. This caseload allows the medical officer and the two sisters to handle the work adequately without unnecessary stresses for the mothers or the staff.

If accommodation enables mothercraft work to be carried out at the same time as the pre-natal clinic, an additional allocation is made to the nursing staff for this purpose.

The mothers attending the pre-natal clinics are all booked at the public obstetric hospitals. A close liaison is observed with the out-patient departments and each mother has a thoracic X-ray and a blood examination for the Rhesus factor, Wassermann reaction, blood group and blood count.

Attendances at Manly and Dee Why and Parramatta continue to be heavy, warranting two sessions weekly or a specially adjusted service. At Beverley Hills, Harbord and Mascot the attendances are small: the remainder of the clinics continue to increase.

Many New Australian mothers attend the clinics, the highest proportion being at Campsie, Parramatta and Mascot. Many of these mothers attend before booking at a hospital. It is therefore necessary for the medical officers to assist in the arrangements for their hospital booking.

These factors add considerably to the work of the clinics and the language difficulty makes the work more exacting for the medical officers, the sisters and the dictitians.

The three dietitians from the Nutrition Division regularly visit eight of the pre-natal clinics. Arrangements are made for mothers from the two smallest to attend the nearest clinic for this advice. There is close co-operation between the medical officers and the dietitians, with the important objective of ensuring that every expectant mother fully understands the necessity for following the advice given concerning a balanced diet with adequate vitamins and basic protective proteins. The mother is instructed in the relationship of adequate diet to the control of complications of pregnancy and the survival of her baby.

Translations of the general and special instructions concerning nutrition are available in seven languages. This reduces the difficulties for both the mothers and the staff of the clinics and ensures that the New Australian mother not yet acquainted with the language can receive the same preventive care as mothers who readily understand and speak English.

It is considered that this nutritional instruction is one of the most important factors in the control of the complication known as toxaemia of pregnancy which, if unchecked, may cause the death of the mother and her baby. It would also appear from our experience with early nutritional instruction, that the onset of any signs or symptoms of toxaemia is prevented in many instances, and actually a decline in cases of early toxaemia is noticed.

The co-operation of the public maternity hospitals is greatly appreciated by the Department, as this service enables the continuity of pre-natal care to be effective. At the same time the expectant mother is safeguarded against the fatigue and expense of travelling for all medical supervision to the hospital where she is booked. This is particularly important for mothers suffering from toxaemia, as it may be essential that she attends for supervision as often as each week: this would be impracticable, for instance, for a mother with two other children living at Liverpool, and would possibly lead to the non co-operation of the mother, with disastrous results.

The departmental officers would like to express their appreciation of the interest and courtesy extended to them by the medical superintendents of the public maternity hospitals.

Special medical committee investigating maternal mortality.—The special medical committee investigating maternal mortality in the metropolitan area includes the Director-General of Public Health, the Emeritus Professor and the Professor of Obstetrics at the University of Sydney, the senior Honorary Medical Officers of the Royal Hospital for Women and the Women's Hospital, Crown-street, a general practitioner appointed by the N.S.W. Branch of the British Medical Association and the Director of Maternal and Baby Welfare; the latter is the medical secretary of the Committee.

The co-operation of the medical superintendents of the metropolitan obstetric hospitals and medical practitioners in private practice has been greatly appreciated by the Committee. Questionnaires to furnish a detailed and accurate ease history, are sent to consultants, to medical practitioners, and to the public obstetric hospitals shortly after the notification of each maternal death. Thus, with the complete history of the case, the Committee endeavours to assess as accurately as possible the avoidable factors, if any, and the responsibility for same in each maternal death.

Free Consultant Service.—Since the scheme came into operation in 1939 the services of obstetric consultants who have agreed to receive a reduced fee from the Department, have been available for all patients who are unable to meet a specialist's fee, during pregnancy, as well as during the time of confinement.

The consultant service is, however, not frequently used because fewer mothers are confined in their own home, and those in the obstetric hospitals are provided with a specialist service when necessary. There were five cases in which it was made use of during the year.

Metropolitan Blood Transfusion Service.—The decrease in maternal deaths from haemorrhage is largely due to the mobile blood transfusion service, as it is considered that with each transfusion given at the bedside of a patient, a life is saved.

This service is available to any medical practitioner at any hour of the day or night. The original unit (1939) was stationed at the Women's Hospital, Crown-street. During 1945 other units were established at Royal Prince Alfred Hospital, North Shore Hospital, and the Royal Hospital for Women, Paddington. This year an additional unit was established at St. George Hospital, Kogarah. Transfusions from these units were given on twenty-eight occasions during the year.

During the year under review still another safeguard of maternal life came into operation with the introduction of arrangement whereby serum held by certain hospitals in the metropolitan area is made available on demand. This enables an immediate intravenous injection to be commenced, pending the arrival of the Mobile Blood Transfusion Unit, thus minimising the effects of shock due to loss of blood. Twenty-one hospitals agreed to co-operate in this scheme.

Physiotherapy in pregnancy and the puerperium.—Under the supervision of qualified physiotherapists pre-natal and post-natal exercises are a routine at the Royal Hospital for Women; and post-natal exercises are routine procedure at the Women's Hospital, Royal North Shore and King George V and Ryde District Hospitals. Medical officers at the Departmental chinics have observed that mothers who have attended these hospitals have received considerable benefit from these exercises. Moreover, their abdominal muscles usually regain normal tone and their posture is resumed correctly. Post-natal examinations reveal that the mothers who have had post-natal exercises less frequently develop gynaecological abnormalities, such as retroversion, cystoceole, rectoceole, and the like.

At the metropolitan obstetric hospitals where this procedure has been instituted, medical and nursing staff report that the mothers express their appreciation of the sense of well-being which the exercises produce and of the regaining of their normal figure.

The New South Wales Branch of the Australian Physiotherapy Association conducts the training in this subject at the physiotherapy centre at the Royal Hospital for Women; the instructor is Mrs. Nancy Leigh. The Director of Maternal and Baby Welfare is a member of the Council and acts as adviser on this subject.

The Departmental sound film in black and white, "Physiotherapy in Pregnancy and the Puerperium" continues to be used for the teaching of medical and physiotherapy students and for the training of nurses. Copies are used for training physiotherapy students in other States.

Control of Puerperal Infection.—To protect mothers after the birth of their babies, from cross infection, which might prove fatal, every effort is made by this Department to prevent the spread of puerperal sepsis. Control is effected by the administration of the Nurses Registration Act, which makes it compulsory for all obstetric nurses to notify any case of puerperal pyrexia occurring in their practice, which prohibits a nurse from attending any other case while attending a patient with puerperal infection, and which examines her methods in the management of her cases; also by the Public Health Act, under which puerperal infection is a notifiable disease, and by the Private Hospitals' Act.

The Regulations of the various acts are designed to prevent the occurrence of puerperal sepsis, particularly those for nurses relating to the wearing of masks, the management of the case, etc. Each case of infection occurring is investigated by bacteriological examination. Further action is determined by those results, the dual object being to protect midwifery patients from further possibility of infection and to avoid any delay or difficulty in nursing and medical supervision.

During 1950 fourteen cases were notified to the local authorities. Of these, six were due to abortal sepsis (all in the metropolitan area) and eight following confinement (three in the city and five in the country).

The distribution of these cases was:

Private hospitals: Abortal sepsis, nil; sepsis following confinement, two. Public hospitals: Abortal sepsis, six; sepsis following confinement, six.

Under the Nurses' Registration Act, ninety cases of pyrexia were notified during 1950 (fifteen in the city and seventy-five in the country).

Vital Statistics.

The live birth rate for New South Wales for 1950 was 22.20 per 1,000 mean population. The number of live births was 71,592 and of still births 1,406, a total of 72,998. See Table I.

Table I reveals the increase in the number of births and the birth rate for the whole State and the continuing higher proportion of both in "the remainder of the State" to the number and the rate in Sydney. The birth rate per 1,000 live births for New South Wales was 18.87; the number of live births and still deaths was 72,998.

Table I.

Live Births and Still Births—New South Wales.

		Live	Births.	Stil	l Births.
Year.	Total			1	
	Births.	37 1	Rate per	37 1	Per 1,000
		Number.	1,000 of	Number.	total births live and sti
			population.		live and su
	ST	ATE OF N	ew South W	ALES.	(
1936	47,612	46,193	17·31	1,419	29.80
1937	48,949	47,497	17.62	1,452	29.66
1938	48,792	47,319	17.38	1,473	30.19
1939	49,363	48,003	17.45	1,360	27.55
1940	50,724	49,382	17.78	1,342	26.46
1941	53,193	51,729	18.47	1,464	27.52
1942	54,058	52,647	18.60	1,411	26.10
$1943 \\ 1944$	58,730	57,265	20.04 20.65	1,465	$\begin{array}{c} 24.94 \\ 24.72 \end{array}$
1944 1945	$\begin{bmatrix} 61,123 \\ 63,202 \end{bmatrix}$	59,612 $61,202$	20.03	$1,511 \\ 1,540$	$\begin{array}{c} 24.72 \\ 24.37 \end{array}$
1946	68,794	67,247	22.83	$\begin{vmatrix} 1,540 \\ 1,547 \end{vmatrix}$	22.49
1947	70,864	69,398	$\begin{array}{ c c c }\hline 23.25 \\ \hline \end{array}$	1,466	20.69
1948	68,560	67,234	22.19	1,326	19.35
1949	70,091	68,812	22.10	1,279	18.25
1950	72,998	71,592	22.20	1,406	19.26
	METROPOL		A (Statistical	Metropoli	s).
1936	18,341	17,759	14.23	582	31.73
1937	18,748	18,158	14.48	590	31.47
1938	19,150	18,559	14.73	591	30.86
1939	19,885	19,223	15.24	562	28.26
1940	20,515	19,942	15.53	573	27.93
$1941 \\ 1942$	23,019	22,366	17.05	$\begin{array}{c} 653 \\ 628 \end{array}$	28.37
1942 1943	$\begin{bmatrix} 23,848 \\ 27,700 \end{bmatrix}$	23,220 $26,989$	$\begin{vmatrix} 17.26 \\ 19.52 \end{vmatrix}$	711	$\begin{array}{c} 26.33 \\ 25.67 \end{array}$
1944	29,014	28,318	19.96	696	24.58
1945	30,230	29,501	20.42	729	24.12
1946	32,467	31,769	21.68	698	21.50
1947	32,536	31,918	21.51	618	18.99
1948	30,605	30,047	20.01	558	18.23
1949	30,466	29,936	19.56	530	17.40
1950	30,213	29,643	18.92	570	18.87
		REMAIND	er of St at e		
1936	29,271	28,434	20.02	837	28.59
1937	30,201	29,339	20.36	862	28.54
1938	29,642	28,760	19.66	882	29.76
1939	29,478	28,680	19.35	798	27.07
$ \begin{array}{c c} 1940 \\ 1941 \end{array} $	30,209	29,440	19.70	769	25.46
$\frac{1941}{1942}$	$ \begin{array}{c c} 30,174 \\ 30,210 \end{array} $	29,363 $29,427$	$\begin{vmatrix} 19.72 \\ 19.81 \end{vmatrix}$	811 783	$\begin{array}{c} 26.88 \\ 25.92 \end{array}$
1943	31,030	30,276	20.53	754	$\frac{23.92}{24.30}$
1944	32,109	30,270 $31,294$	$\frac{20.33}{21.32}$	815	25.38
1945	32,972	32,161	21.83	811	24.60
1946	36,327	35,478	$\frac{23.98}{23.98}$	849	23.37
1947	38,328	37,480	24.97	848	22.12
1948	37,955	37,187	24.34	768	20.23
1949	39,625	38,876	24.55	749	18.90
1950	42,785	41,949	26.13	836	19.54

Table II.

Live Births and Maternal Mortality in New South Wales.

Comparative figures for the whole State, the Metropolitan Area and Remainder of State.

	**				_						
Live Births.			Deaths (exeludi	from Puerpera ng Criminal Al	l Causes bortion).	Maternal Mortality Rate per 1,000 L Births (excluding Criminal Abortion)					
Year.	State.	Met.	Rem.	State.	Met.	Rem.	State.	Met.	Rem.		
1936 1937 1938 1939 1940 1941 1942 1943 1944 1945 1946 1947 1948 1949 1950	46,193 47,497 47,319 48,003 49,382 51,729 52,647 57,265 59,612 61,662 67,247 69,398 67,234 68,812 71,592	17,759 18,158 18,559 19,323 19,942 22,336 23,220 26,989 28,318 29,501 31,769 31,918 30,047 29,936 29,643	28,434 29,339 28,760 28,680 29,440 29,363 29,427 30,276 31,294 32,161 35,478 37,480 37,187 38,876 41,949	236 198 181 162 175 177 172 169 155 122 100 112 81 84 70	103 83 72 59 59 67 61 66 74 46 33 38 30 27 18	133 115 109 103 116 110 111 103 81 76 67 74 51 57	$\begin{array}{ c c c c }\hline 5.11 \\ 4.17 \\ 3.82 \\ 3.38 \\ 3.54 \\ 3.27 \\ 2.95 \\ 2.60 \\ 1.97 \\ 1.49 \\ 1.61 \\ 1.20 \\ 1.22 \\ .98 \\ \hline \end{array}$	5·80 4·57 3·88 3·05 2·96 2·99 2·62 2·45 2·61 1·56 1·03 1·19 1·33 ·90 ·61	4.68 3.92 3.79 3.59 3.94 3.74 3.77 3.40 2.59 2.36 1.89 1.97 1.37 1.47 1.24		

TABLE III.
Causes of Maternal Mortality, 1950.

	New So	outh Wales.		tistical ropolis.	Remainder of State.	
Causes of Death.	Number.	Rate per 1,000 Live Births.	Number.	Rate per 1,000 Live Births.	Number.	Rate per 1,000 Live Births.
Toxaemias of pregnancy Ectopic pregnancy Other complications of pregnancy Abortion (including criminal) Delivery with specified complication Puerperal urinary infection without other sepsis. Sepsis of childbirth and the puerperium Puerperal phlebitis and thrombosis Puerperal pulmonary embolism Other and unspecified complications of the puerperium	5 4 26 2 3 3	0·24 0·08 0·07 0·06 0·36 0·03 0·04 0·04 0·04	4 1 2 1 7 1 	0·14 0·03 0·07 0·03 0·24 0·03 0·07	13 5 3 3 19 1 3 3 2	$\begin{array}{c} 0.31 \\ 0.12 \\ 0.07 \\ 0.07 \\ 0.46 \\ \dots \\ 0.02 \\ 0.07 \\ 0.07 \\ 0.05 \end{array}$
Total, excluding criminal abortion Criminal abortion	70 10	0·98 0·14	18 6	0·61 0·20	52 4	1·24 0·09
Total	80	1.12	24	0.81	56	1.33

The maternal mortality rate including criminal abortion for 1950 in New South Wales is the lowest on record: the rate for Sydney is .81 and for the remainder of State 1.33. Excluding criminal abortion the rates for the State, for Sydney and for the remainder of State are as follows: .98, .61, 1.24 respectively, per 1,000 live births. See Table II.

In the sixth revision (1948) of the International List of Causes of Death fundamental changes have taken place, so that strict comparison of the analysed figures is not possible.

The sixth revision (see Table III) indicates that of the eighty maternal deaths in the State seventeen died of toxaemia of pregnancy. This is the major single cause of death and it will be noted that four of these mothers died in Sydney while thirteen died in the remainder of State. These deaths are now, with very few exceptions, regarded as preventable. It is regrettable that so many mothers lost their lives from a condition which can be prevented and controlled by effective antenatal care. The large proportion of deaths occurring outside Sydney indicates the grave need for better antenatal care in country districts and in many instances better cooperation between the mother and her relatives.

The other major cause of loss of lives of mothers in this State is that classified as "Delivery with specified complications", which was responsible for twenty-six of the total of eighty deaths.

In this group also the loss was less in the metropolitan area (i.e. 7) than in the remainder of the State where there were nineteen.

A much higher death rate from ectopic gestation is also found outside the metropolitan area—.12 as compared with .08. This also points to lack of diagnostic skill or to lack of facilities.

These facts and examination of Table III leaves no room for any possible doubt that the services available in Sydney for many years under the scheme referred to earlier should be extended to the whole State.

From the above facts it will be seen that there is no reason for complacency in the mortality rate in this State. It appears that some of these seventeen mothers may have lost their lives unnecessarily and possibly other deaths were preventable.

Table IV.

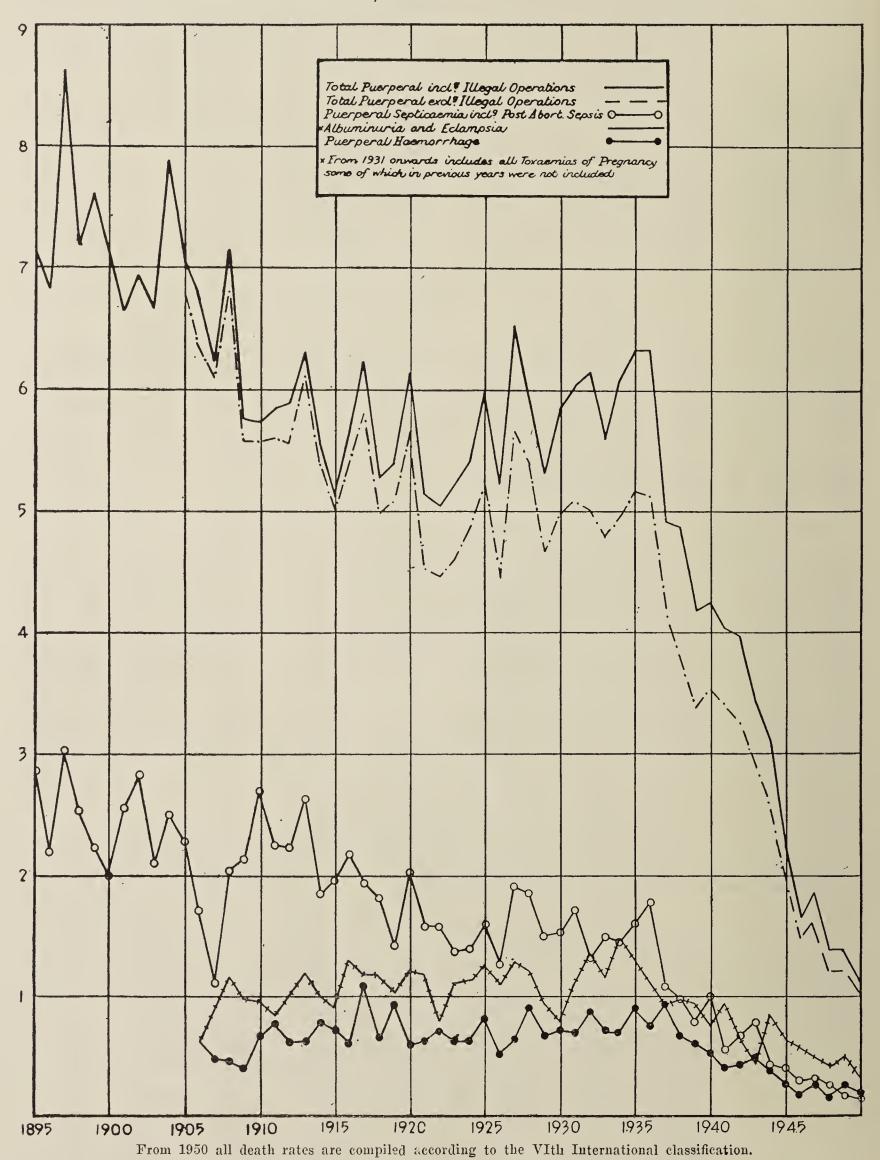
Deaths from Criminal Abortions in New South Wales.

Metropolitan Area, Remainder of State and Whole State.

	Deat	ths from Cri		Abortion		Total Puerp luding Crim		
Year.		le deaths ll ages.	a	ale deaths t ages 14 years.		Female deaths at all ages.		ortion). de deaths bages 4 years. per cent. 16.97 14.75 14.07 13.24 15.52 14.35 14.63 13.92 13.70 10.80 9.30 11.38 8.24 8.94 7.22 14.96 12.02 12.16 11.14 11.69 11.84 12.11 11.98 12.38 8.95 5.80 7.69 6.85 6.67 4.56
	No.	per eent.	No.	per cent.	No.	No. per cent.		per cent.
			NE	W SOUTH	WALES			
1936	56	0.52	56	3.30	292	2.71	288	16.97
1937	35	0.32	35	2.22	233	2.14	233	
1938	50	0.44	50	3.09	231	2.03	228	
$1939 \\ 1940$	$\frac{38}{34}$	0.32	38 34	2·53 2·54	$\frac{200}{209}$	1·71 1·86	$\frac{199}{208}$	
1941	32	0.26	32	2.22	209	1.73	$\frac{203}{207}$	
1942	37	0.29	37	2.60	209	1.64	208	
1943	27	0.21	27	1.93	196	1.52	195	
$\frac{1944}{1945}$	31 17	$0.25 \\ 0.14$	31 16	$\frac{2.30}{1.26}$	186 139	1·53 1·14	185 137	
1946	11	0.09	11	0.93	111	0.89	110	
1947	18	0.14	18	1.59	130	1.05	120	11.38
1948	11	0.08	11	0.99	92	0.69	92	
$\frac{1949}{1950}$	$\begin{array}{c c} 10 \\ 10 \end{array}$	0.08 0.07	$\frac{10}{10}$	0.95	$\frac{94}{80}$	$0.74 \\ 0.60$	$\frac{94}{79}$	
1000	10					Metropolis)		, 22
1936	1 29	1 0.50	29	3.34	. 132	1 2·27	130	14.96
1937	17	0.28	17	2.04	100	1.67	100	
1938	36	0.57	36	4.13	108	1.71	106	
1939	$\frac{30}{22}$	0.47	$\frac{30}{22}$	3·75 3·17	89 81	1.38 1.28	89 81	
$1940 \\ 1941$	21	0.31	22	2.83	88	1.30	88	
1942	25	0.35	$\frac{25}{25}$	3.56	86	1.21	85	
1943	17	0.24	17	2.45	83	1.15	83	
$\frac{1944}{1945}$	18 14	0.26	$\frac{18}{13}$	2.45	92	1·35 0·87	91 59	
$1945 \\ 1946$	5	0.20	5	0.78	38	0.53	37	
1947	9	0.13	9	1.41	47	0.66	46	
1948	10	0.13	10	1.71	40	0.52	40	
$\frac{1949}{1950}$	9 6	$0.12 \\ 0.08$	9	1.67	$\frac{36}{24}$	$0.49 \\ 0.32$	$\begin{vmatrix} 36 \\ 24 \end{vmatrix}$	
1990	O	0.03		IAINDER OI			. 54	4.90
1936	1 27	0.55	1 27	3.26	+160	1 3.24	158	1 19.08
1937	18	0.37	18	2.41	133	2.72	133	
1938	14	0.28	14	1.87	123	2.44	122	
$\frac{1939}{1940}$	$\frac{8}{12}$	0·15 0·24	$\frac{8}{12}$	1·14 1·85	111 128	$\frac{2.11}{2.58}$	110 127	
$\frac{1940}{1941}$	112	0.24	11	1.57	$\frac{128}{121}$	2.57	119	
1942	12	0.21	12	1.67	123	2.18	123	17.08
1943	10	0.18	10	1.41	113	1.98	112	
$1944 \\ 1945$	13	0.24	13	2·11 0·49	$\frac{94}{79}$	1.76 1.49	94 78	
1945	6	0.00	6	1.10	73	1.34	73	
1947	9	0.17	9	1.68	83	1.56	83	
1948	1	0.01	1	0.19	52	0.91	52	9.77
1949 1950	1 4	$0.02 \\ 0.07$	1 1	$0.20 \\ 0.70$	58 56	$\frac{1.08}{0.95}$	58 55	11.35 9.68
1950	. 4	0.07	4	0.40	90	0.89	33	9.08

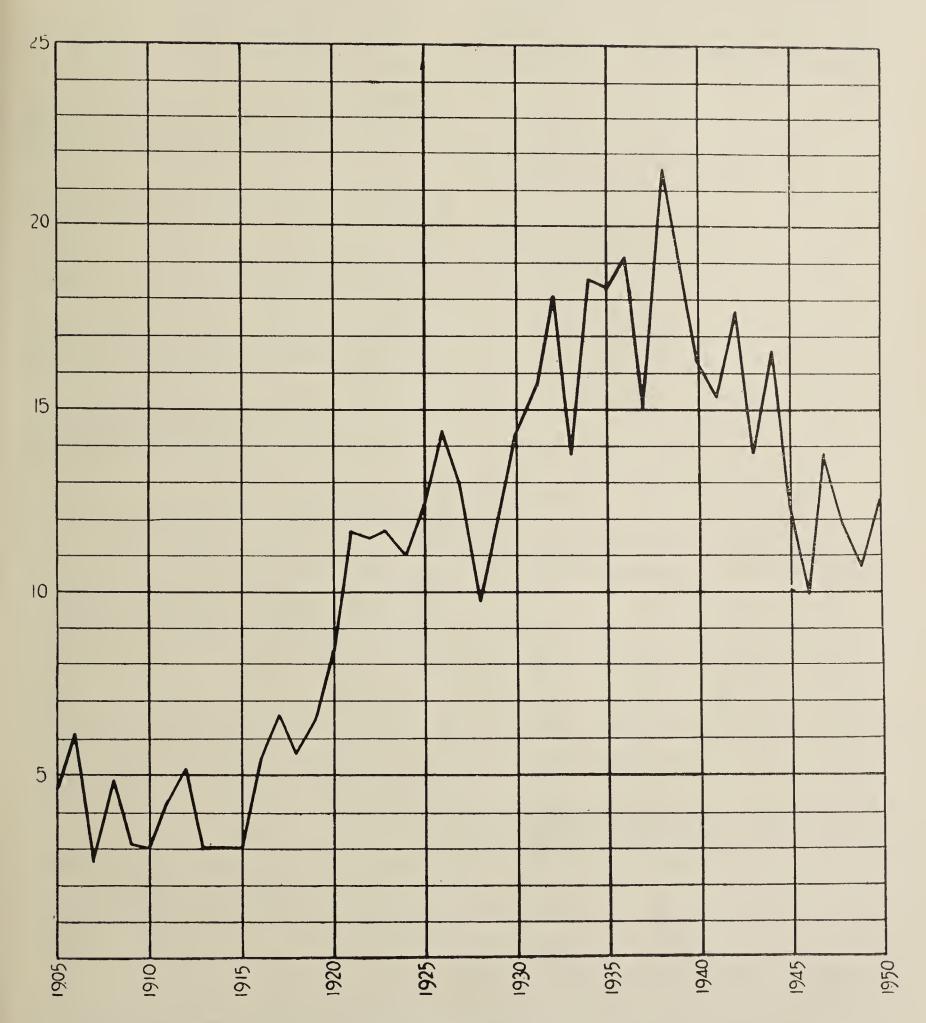
GRAPH II.

Deaths due to Puerperal Condition, New South Wales—Death Rates from Certain Causes per 1,000 Live Births for the years 1895-1950.



GRAPH 12.

Maternal Mortality—Deaths from Criminal Abortions as percentage of total Maternal Deaths in New South Wales, 1905-1950.



From 1950 all death rates are compiled according to the VIth International classification.

PART II-INFANT WELFARE.

Baby Health Centres.

In 1944 the department implemented the policy of the Government to give generous financial assistance in the establishment of new baby health centre premises and since that date the development of this most important field of maternal and baby welfare has progressed considerably.

The policy provided that, where in future any local organisation of approved status is prepared to co-operate in the establishment of a baby health centre for use either in substitution of existing unsatisfactory premises or as a fresh or additional centre:—

- (a) The Government makes a grant of 50 per cent. of the capital cost of building and equipping the centre (exclusive of the cost of the site) and, if required, advances up to a further 25 per cent. of these costs, subject to repayment of the loan by equated payments of principal and interest over a period of ten years.
- (b) If it is not possible to erect a new building but it is possible to purchase or rent suitable premises, the Government contributes 50 per cent. of the cost of the building exclusive of the site, or alternatively, 25 per cent. of the rent payable.
- (c) In addition to any commitments involved in (a) of above, the local organisation will be required to maintain premises in good order and repair and be responsible for all maintenance upkeep such as cleaning, light and fuel, telephone charges, replacement of equipment and like service, and undertake to make the premises available at all times to the Department of Public Health for use as a baby health centre free of rent.
- (d) The Government undertakes to provide also, free of cost, the necessary staff for the centre and be responsible for any travelling and sustenance expenses of the members of such staff in accordance with the Public Service Regulations.
- (e) The arrangement will also be subject in all cases to the local organisation obtaining the approval of this department as to location, plans and equipment of the centre, and to the organisation further undertaking not to interfere in any way with the conduct of the activities of the centre.

If the application for Government assistance is made, it is necessary for the council or committee to complete a resolution embodying the conditions under which such grant is accepted.

Official standard lists of equipment are used as a basis of discussion and planning, and all purchases of equipment are made through ordinary commercial channels.

Payment of subsidy is made on production of receipts for all purchases which are in accordance with the list previously submitted and approved.

While observing the standard requirements for adequate and proper relationships of rooms for the most efficient working conditions, external appearances of general design have varied widely. The combination of domestic and institutional architecture has been the objective.

There are now 278 baby health centres in the State, of which seventy-six are in the metropolitan area, eleven in Newcastle and 191 in the country.

There were eleven new buildings completed and occupied under the new policy during the year, viz., Ariah Park, Ballina, Campbelltown, Dorrigo, Eden, Grafton South, Kempsey, Stockinbingal, St. Mary's, Toronto and Wagga South.

In addition a centre was opened in temporary premises at Yeoval with nursing staff and 50 per cent. of the equipment provided by this department, and a new baby health centre building was erected at Macksville by the C.W.A. for which subsidy was not claimed.

This assistance by the Government has now been increased to provide a subsidy of 75 per cent., or a rental refund of $37\frac{1}{2}$ per cent., for cases in which format acceptance of an earlier offer of 50 per cent. had not actually been completed by May, 1950.

The rental subsidy payable for new projects has been increased to $37\frac{1}{2}$ per cent.

The baby health centre staff consists of three nurse inspectors, 126 sisters-in-charge, forty-six sisters, and various part-time officers whose services aggregate ten full-time sisters.

The attendances for the year were:—

Individual attendances—107,205.

Total attendances—1,072,174.

Staff Lectures.—Routine staff lectures are given each year at least once a quarter.

Departmental Booklets.—The departmental free booklet "Healthy Motherhood", of which 50,000 are printed annually, continues to be a most valuable publication and is used by all the metropolitan and country obstetric hospitals, the majority of obstetric specialists and general practitioners.

Its chief aim is to raise the standard of pre-natal care by encouraging the mother to co-operate with her doctor, hospital or clinic by following implicitly the instructions given, by attending regularly, and by paying particular attention to diet during pregnancy.

In addition to this valuable instruction in pre-natal care, "Our Babies" is another free booklet from the department of which 50,000 are printed annually.

Services for the Pre-school Child.—The general interest of the community in recent years has been awakened to the needs of the pre-school child and there has been a marked demand from all sections of the community for increased facilities for this age group.

The baby health centres always encouraged mothers to bring their toddlers and pre-school children to the centres for routine supervision, as the years from 0 to 5 are those in which the foundation is laid for the child's future health. These are the "vulnerable" years; the most formative period and the one of most rapid growth.

The baby health centres give the parent of pre-school children instruction in simple dietetics and elementary hygiene, as well as checking the weight and physical development of the child.

Unfortunately, owing to serious shortage of staff, it has been found necessary, in order to continue to staff all baby health centres in the city and the country, and provide advice and supervision so essential for the mothers of young infants, to discontinue temporarily in the metropolitan area the practice of seeing children aged from 2 to 5 years as a matter of routine. Advice is, however, given in any case when especially needed.

A medical officer makes regular visits to five baby health centres in the metropolitan area at fortnightly intervals, and advises on cases selected by the sister from the babies brought to the centre who are not attended by a private doctor.

The cases so selected are those concerning whom there are difficulties which cannot be dealt with by the sisters themselves.

Acutely ill babies, or those with infectious diseases, are not seen.

During 1950, 534 babies were seen by the medical officer.

The centres where the medical service is located were chosen in the light of their accessibility to the surrounding areas, so that cases could be referred by sisters at adjacent baby health centres without causing the mothers undue hardship in travelling.

Vital Statistics.

Infant Mortality.—In 1950, 1,936 infants died during the first year of life, representing a mortality rate per 1,000 live births of 27.04. The city of Sydney had a rate of 25.44 and the remainder of State 28.18.

The loss of infant life throughout the first six months of life was lower in Sydney than in the remainder of the State. This was particularly marked in the two periods, second to fourth week, inclusive, and the third to the sixth month, inclusive.

From six to twelve months, however, the loss of life was greater in Sydney than in the remainder of the State—3.44 and 3.41 respectively.

Table V.

New South Wales.

Infantile Mortality Rate per 1,000 Live Births.

Continuous Five-yearly Average.

Period.	Rate.	Period.	Rate.
1937–1941	41.29	1942–1946	33.30
1938–1942 1939–1943	$\frac{41.18}{39.95}$	1943–1947 1944–1948	31.38 30.31
1940–1944 1941–1945	$37.72 \\ 35.95$	1945–1949 1946–1950	29.62 28.91

The above table indicates the continuous reduction of the infant mortality rates in the State. This rate has remained thirty and under per 1,000 live births since 1944; 27.04, the rate for 1950, is the lowest on record.

Table VI hereunder indicates that in the mortality from respiratory diseases the loss was higher in the remainder of the State, being 139, while in Sydney there were seventy-seven deaths.

Congenital malformations and certain diseases peculiar to infancy were responsible in New South Wales for a mortality rate of 20.13 out of the total 27.04 per 1,000 live births. Surely this is an arresting proportion, and as it is analysed, becomes more significant.

The mortality rate for prematurity was 6.75 and for birth injury 3.43; together they accounted for half the deaths in this group. In comparing the figures for these two causes for Sydney and the remainder of the State, they were, respectively, prematurity 5.50 and 7.63, birth injury 3.64 and 3.45. In each instance the death rate was lower in Sydney.

Congenital abnormalities of the circulatory system and illdefined diseases peculiar to infancy accounted for 1.30 and 1.54 for New South Wales, respectively.

The grave problems arising out of prematurity are well demonstrated. This can be further emphasised by pointing out that of the 1,345 infants dying in the first four weeks of life (neonatal) 706 or 52.5 per cent, were born prematurely.

Table VI.

Infantile Mortality of Children under one year of age classified according to the International List of Causes of Death.*

Rate per 1,000 Live Births.

	Class.	New South Wales.	Statistical Metropolis,	Remainder of State.
1	Infective and Parasitic Diseases	0.54	0.71	0.43
2	Neoplasms	0.14	0.20	0.43
$\frac{2}{3}$	Allergic, Endocrine System.		0.20	0.36
	Metabolic and Nutritional Diseases.		0.20	0.30
4	Diseases of the Blood and Blood Forming Organs.		0.07	
5	Mental, Psychoneurotic and Personality Disorders.	0.03	0.03	0.02
6	Disorders of the Nervous System and Sense Organs.	0.94	1.05	0.86
7	Diseases of the Circulatory System	0.01	0.03	
$egin{array}{c} 7 \ 8 \ 9 \end{array}$	Diseases of the Respiratory System	2.11	1.62	2.45
9	Diseases of the Digestive System	1.73	1.55	1.86
10	Diseases of the Genito-Urinary System.	0.04	0.03	0.05
11	Deliveries and Complications of Pregnancy, Childbirth and the Puerperium.			•••
12	Diseases of the Skin and Cellular Tissue.	0.06	0.07	0.05
13	Diseases of the Bones and Organs of Movement.	0.03	0.07	•••
14	Congenital Malformations	3.49	3.48	3.50
15	Certain Diseases of Early Infancy	16.64	15.48	17.45
16	Symptoms, Senility and Ill-defined Conditions.	0.25	0.24	0.26
17	Accidents, Poisonings and Violence	0.71	0.61	0.79
	Total, All Causes	27.04	25.44	28.18

* Sixth Revision (1948).

Table VII.

New South Wales—Infantile Mortality According to Age.

Rate of Mortality per 1,000 Live Births.

produced when the								
Year.	Under 1 week.	1 week and under 1 month.	Total under 1 month.	1 month and under 3 months.	Total under 3 months.	3 months and under 6 months.	6 months and under 12 months.	Total under 1 year.
1931 1932 1933 1934 1935 1936 1937 1938 1939 1940 1941 1942 1943 1944 1945	21.58 22.94 21.90 24.02 22.99 23.64 22.80 23.42 22.96 21.12 23.55 20.97 19.61 18.30 18.28 18.82 18.82 18.22	5.22 4.72 5.70 5.12 4.77 5.93 5.58 4.48 4.48 4.46 5.97 4.52 4.23 3.66 3.52 3.14 3.24	26.80 27.66 27.60 29.14 27.76 29.57 28.38 27.90 27.44 25.58 29.52 25.49 23.84 21.96 21.80 21.96 21.46	$\begin{array}{c} 4.11 \\ 3.58 \\ 3.42 \\ 4.94 \\ 3.44 \\ \hline \\ 4.07 \\ 3.10 \\ 3.80 \\ 2.48 \\ 3.85 \\ \hline \\ 4.23 \\ 3.97 \\ 3.56 \\ 2.16 \\ 2.43 \\ \hline \\ 2.19 \\ 2.26 \\ \end{array}$	30.91 31.24 31.02 34.08 31.20 33.64 31.48 31.70 29.92 29.43 33.75 29.46 27.40 24.12 24.23 24.15 23.72	$\begin{array}{c} 4.61 \\ 3.07 \\ 2.88 \\ 4.76 \\ 2.87 \\ \hline \\ 3.66 \\ 3.05 \\ 3.46 \\ 3.56 \\ 3.62 \\ \hline \\ 4.18 \\ 4.27 \\ 3.42 \\ 2.38 \\ 2.61 \\ \hline \\ 2.37 \\ 2.51 \\ \hline \end{array}$	8·00 6·75 5·45 7·52 5·37 6·17 6·15 6·68 7·54 5·97 5·84 6·46 5·36 4·18 3·79 3·70 3·58	43·52 41·06 39·35 46·36 39·44 43·47 40·68 41·84 41·02 39·02 43·77 40·19 36·18 30·68 30·63 30·22 29·81
1948 1949 1950	18·38 16·93 16·16	2.95 2.31 2.63	$ \begin{array}{c} 21.33 \\ 19.24 \\ 18.79 \end{array} $	$ \begin{array}{c c} 2.47 \\ 2.05 \\ 2.30 \end{array} $	23.80 21.29 21.09	$ \begin{array}{c c} 2.60 \\ 2.47 \\ 2.53 \end{array} $	3.90 3.53 3.42	30.30 27.29 27.04

Table VII shows the loss of infant life at different age groups. The greatest loss is in the neonatal period where, within the first week the rate in 1950 was 16.16; and in the next three weeks of life 2.63; the total rate in the first month of life being 18.79.

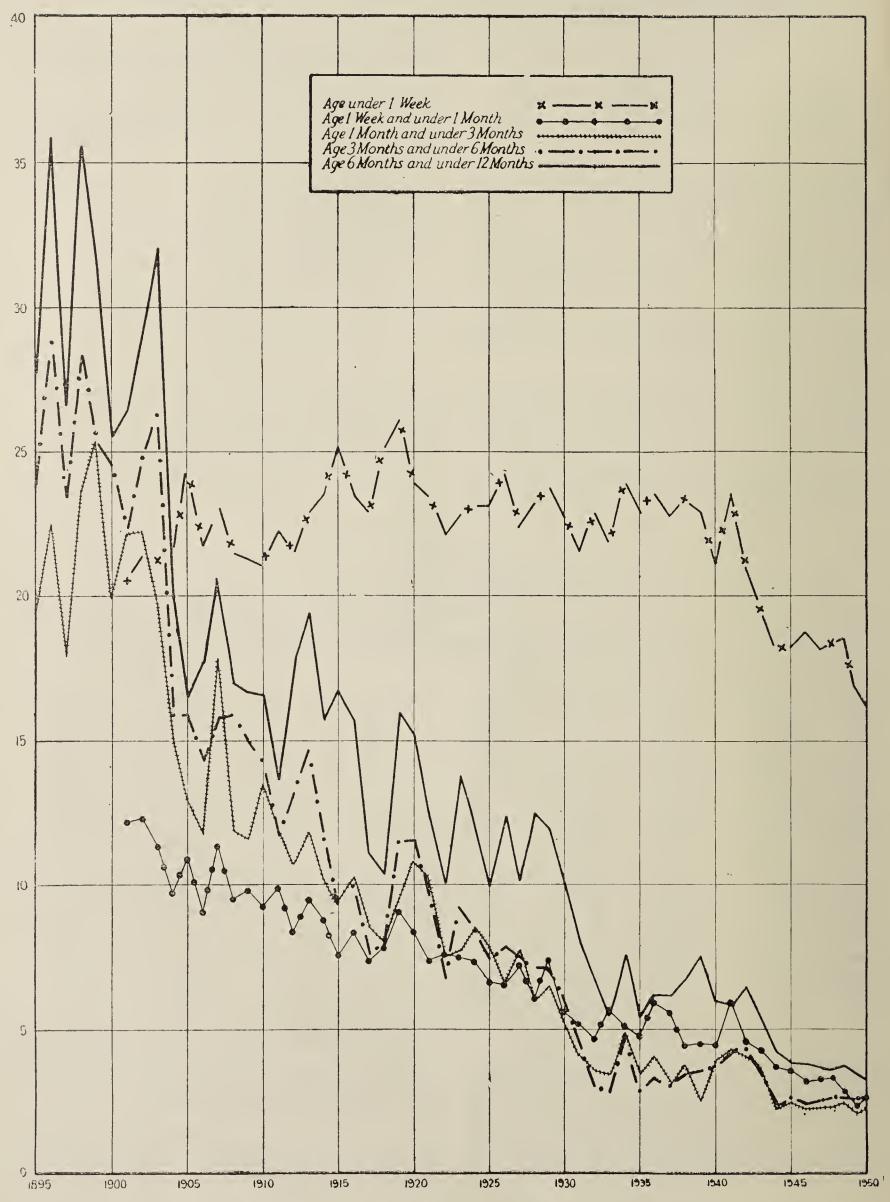
In Sydney the loss of life in the first week was 16.09 (of a total rate for the first year of 25.44). In the remainder of the State the loss of life in the first week was 16.21 (of a total rate of 28.18).

Diarrhoea of the newborn caused four deaths in Sydney and eight in the remainder of the State. Of infants over four weeks, twenty-six who died in Sydney and fifty-five who died in the remainder of the State were premature.

If any reduction is to be achieved in the high neonatal mortality rates, the objective must be twofold—first the prevention of premature births and second the proper care of babies born prematurely.

GRAPH 13.

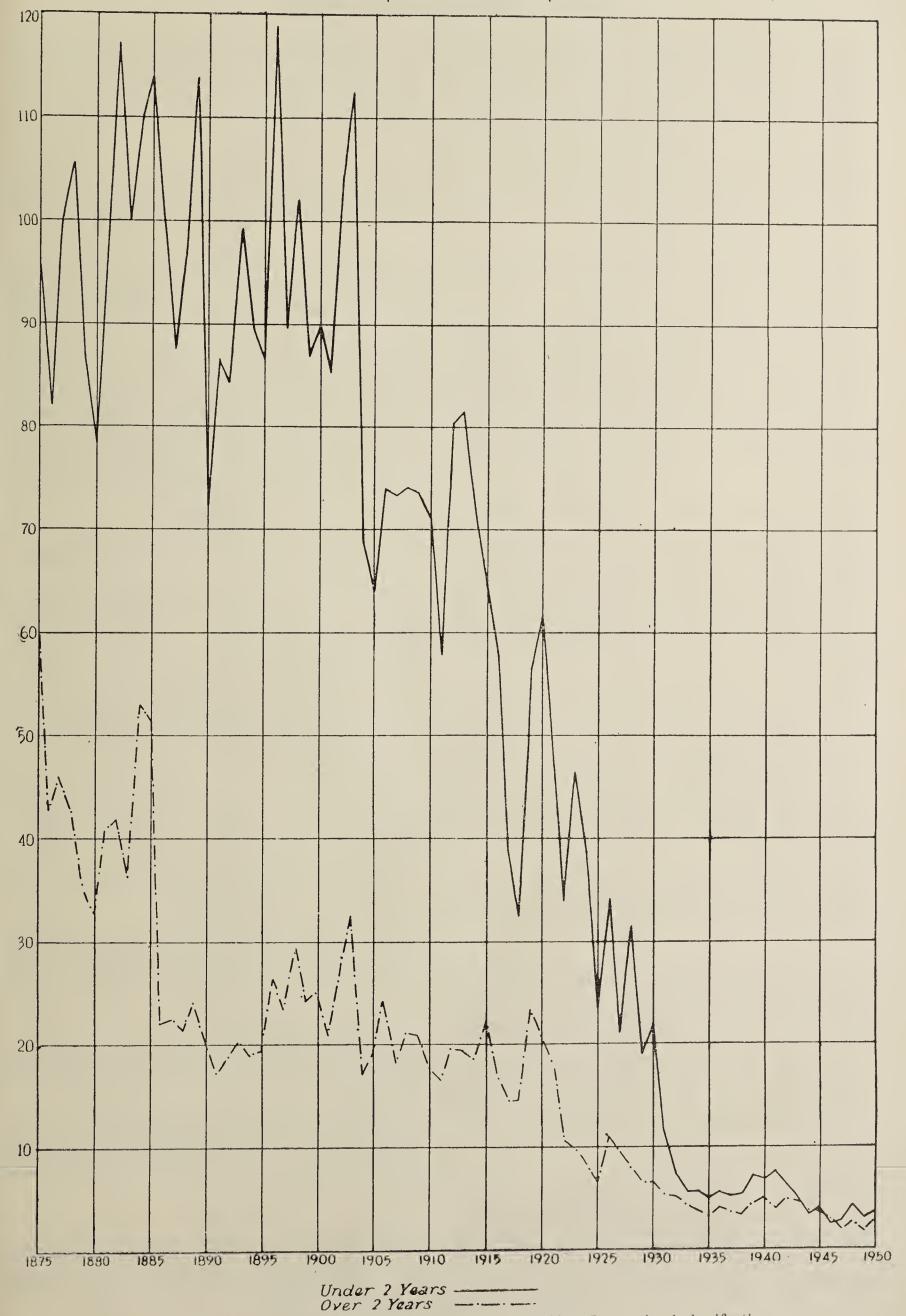
Infantile Mortality, New South Wales—In Age Periods under 1 year, from 1895-1950.



From 1950 all death rates are compiled according to the VIth International classification.

GRAPH 14.

Diarrhoea and Enteritis—Annual Death Rate per 100,000 of the Population in New South Wales, 1875-1950.



From 1950 all death rates are compiled according to the VIth International classification.

PART III-PRE-SCHOOL HEALTH SERVICE.

A health service has been provided since 1946 by this Division for the pre-school centres conducted by the two voluntary organisations subsidised by the Government: the Kindergarten Union (in 1950 receiving £20,000 through the Department of Education) and the Sydney Day Nursery and Nursery Schools Association (in 1950 receiving £20,000 through the Department of Labour and Industry and Social Welfare.

The former offers a service at thirty kindergartens in the metropolitan area from 9 a.m. till 3 p.m. during the three school terms and the latter at fourteen day nurseries and nursery schools either from 7.30 a.m. to 5.30 p.m. or from 8 a.m. to 5 p.m., depending on the requirements of the locality. This service is provided throughout the year except for a three weeks' break at Christmas.

No fees are charged but the cost of meals at the pre-school eentres varies from three to ten shillings per week. In special eircumstances no charge at all is made.

The object of the health service is to improve and safeguard the physical and mental health of the children. Regular visits by specially qualified medical officers build up a liaison between themselves, the director and the mother to this end. To achieve this the medical officer should see each child twice yearly. At the first visit the child is examined to determine any physical defect; the mother is interviewed and the director (or matron) co-operates in supplying any further information which may help in the medical officer's assessment of the child as a whole. In this way a total picture of the child's general health, nutritional status, dental health and social environment, behaviour and intelligence, is available.

The interest of the director (or matron) is basic to the success of the work and with few exceptions is assured.

The correction of physical abnormalities is dealt with in various ways: if the condition warrants it, the mother is advised to take the child to her own doctor or is referred to the appropriate hospital or specialist. If otherwise, the director is advised as to suitable exercises which can be incorporated in the ordinary daily programme and the mother is advised as to suitable shoes or clothing and any special care the child may need at home. By means of this instruction and guidance within the pre-school centres many conditions are corrected.

Daily inspections on entering in the morning are encouraged at all centres. This routine prevents the spread of infection by early detection of infected noses and throats and other signs of contagion and infection. The director soon becomes expert at sighting the tonsils and assessing from the condition of the tonsils, throat, mouth and tongue, together with a general survey for swollen glands or rashes, whether the child is likely to convey infection to others. As this age group is most vulnerable to infections and respiratory diseases, the prevention of cross infection is a major part of any health programme. Routine height and weight records are kept by the director (or matron).

Where behaviour problems, e.g., bed wetting, tantrums, feeding difficulties, aggression, etc., exist, the medical officers discuss all aspects of the eare of the child with the mother and the director; where adjustment fails, the child is referred to a child guidance clinic.

At fourteen day nurseries 733 children were examined once and 951 twice during the year. In addition, seventy-three children were seen by the medical officers for conditions requiring attention at other times. It was possible to arrange interviews with 336 mothers, i.e., about half of the children attending the nurseries. In all, the medical officers made 141 visits.

At the thirty kindergartens 1,090 children were examined once and 1,617 had a second examination. In addition, 76 children were seen by the medical officers for conditions requiring attention. All except five mothers were interviewed. Two hundred and thirty visits were made. Onc new kindergarten was opened during the year at Burwood.

Dental Health.

Close liaison is kept with the Dental Hospital for the eare of the teeth. Some children from the kindergartens are sent direct to the Dental Hospital: by courtesy of the Association, children from six kindergartens attend four of the eight dental clinies held in the specially equipped dental room at the day nurseries. These clinics are staffed by dentists from the Dental Hospital. The dental chairs and the special equipment were provided by the Minister for Health in 1945.

Four hundred and thirty-one children, i.e., 15.9 per cent. of those examined, were found to suffer from dental caries. At the day nurseries, however, where the dental supervision is regular, only those children who had enrolled since the visit of the dentist, i.e., 4.2 per cent. of the children examined, were found to have dental earies. This is the excellent result of the regular dental service given.

Immunisation.

Immunisation against diphtheria is compulsory: 25 children attending the day nurseries and 39 attending the kindergartens were referred for immunisation during the year.

Nutrition.

The nutrition of the children is safeguarded as the nutritional programme of each centre is guided by the advice of one of the trained dictitians from the Department in addition to the individual advice from the Medical Officer to the mother.

The estimation of the nutritional state of a child varies to some extent with the individual assessor. This variation is minimised by working to certain recognised standards. Each year there appears to be an improvement in the nutritional status of the children particularly in the day nurseries: this could reasonably be attributed to the close liaison established between the Medical Officers, Director, Dictitian and the mothers by the health service. As would be expected the proportion of better standard nutrition is higher in the kindergartens as these centres care for fewer under-privileged children and fewer children with difficult home conditions.

Kindergartens.

Nutrition.	1948.	1949.	1950.
Excellent Good	Per cent. 11·8 83·1 11·6 1·1	Per cent. 23·2 66·2 10·09 0·35	Per cent. 26.8 63.1 9.7 0.33

Day Nurseries and Nursery Schools.

Nutrition.	1948.	1949.	1950.
Excellent Good	Per cent. 10·6 66·9 18·2 4·1	Per cent. 22 60 16 2	Per cent. 22.61 64.54 12.58 0.35

Bad Posture.

Only the severe degrees of bad posture were recorded. There were eighteen cases at the kindergarten and four cases at the day nurseries. It is almost invariable that the bad posture is found in the 4 to 5 year age group and is frequently found in children who have social and emotional difficulties.

Knock Knees.

This condition was fairly common and was assessed on a set standard of over 1 inch separation of the internal malleoli, with the child's knees together and the legs straight in the sitting position.

In the day nurseries 232 children had knock knees. Of these 76 were referred for orthopaedic treatment and 136 were kept under observation and given advice on footwear, exereises, nutrition, etc. At the kindergartens 371 had this condition. Of these 161 were referred for orthopaedic treatment and 210 were kept under observation.

Flat Feet.

Flat feet were diagnosed in 382 instances in the kindergartens and 284 in the day nurseries. Of the latter 76 went for orthopaedic treatment and 133 of the former. The remainder were kept under observation and given advice on nutrition, exercise and footwear.

		1 Meningococcal Meningitis 17 Jan.	1 Polio in December. 1 Polio in December.		
	Diphtheria.	:::::::::::::::::::::::::::::::::::::::		G1	:
	German Measles.	::::::::		9	:
Diseases	Whooping Cough.	:::::		19	:
Infectious Diseases.	Scarlet Fever.	::::::		चा	
Infe	Сћіскен Рох.			96	:
	·sdum]v	::121		95	:
	Measles.	10 10 10 01 01 01 01 01 01 01 01 01 01 0	101 - 01 - 01 - 01 - 01 - 01 - 01 - 01	442	:
eet.	Ттеатшепт.	: :0::04:00 00		133	4.9%
Flat Feet.	.noitryredO	1 1 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2		195	7.2%
Knees.	Тгеаттепт.	410846 6		161	2.6%
Knock Knees.	Observation,		14 x x x 0 0 4 1 0 4 1 0 4 1 0 4 1 0 4 1 0 1	210	%2.2
	Bad.	: : : : : : : : : : : : : : : : : : :	: : : : : : : : : : : : : : : : : : :	6	0.33%
tion.	Fair.	12 22 22 17	2000 0 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1	264	2.6
Nutrition.	Good.	06774477 50 0880447 90 0847 90	00 C C C C C C C C C C C C C C C C C C	1,709	63.1%
	Excellent.	900000000000000000000000000000000000000	0.000,001000000000000000000000000000000	725	26.8%
zed ls.	Treatment.	0 HOHIO 00	No 10 1000 100 44000 1000 11 11 11 11 11 11 11 11 11 11 1	98	3.6%
Enlarged Tonsils.	Observation.	161123 16123 16123 1613 16133	847840888888888888888888888888888888888	688	25.4%
pag.	Treatment.	@\\@\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\	: : : : : : : : : : : : : : : : : : :	110	4.06%
Enlarged Glands.	Observation.	11. 12. 13. 13. 13. 13. 13. 13. 13. 13. 13. 13	3881188111161181818181818181818181818181	726	%8.92
	Not Immunized.	ानावा न	: : : : : : : : : : : : : : : : : : :	39	:
	Dental Caries.	70 80 CT 40 41	- 41 51 5 5 5 5 5 5 5 5 5 5 5 5 5 5 5 5 5	431	15.9%
	Occasional Examination.	:::		92	:
	Subsequent Examination.	68 88 88 88 88 88 88 88 88 88 88 88 88 8	: : : : : : : : : : : : : : : : : : :	1,617	:
	Parents.	38 88 88 88 88 88 88 88 88 88 88 88 88 8	108 + 8 11 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1	1,085	:
	First Examination.	60 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	0.440110101440188801010188848018848010	1,090	:
	Sessions.	811.7.001	- x x r x x x x x x x x x x x x x x x x	230	:
		East Chatswood Eastwood Blue Bird Cheltenham Globe Ellen Desailly	Hargray Mirech Lance Leichhardt Little Citizens Little Citizens Peter Pan Peter Pan Phoenix Surry Hills Surbam Samuel Cohen Waverley Crosader Crosader Crosdon Petersham Golden Fleece Hargrave Park Waratah Mayfield Bradfield Park Burwood		

Table IX.—Day Nurseries, 1950.

	Diphtheria.	:::::::::::::::::::::::::::::::::::::::	:	:
	German Measles.	:::::::::::::::::::::::::::::::::::::::		:
ases.	Ипооріпд Соцді.		12	:
Infectious Diseases.	Searlet Fever.	-:::::-::	es	:
Infect	Сһіскеп Рох.	401000 :00 :H :0001HH0	105	:
	·sduunjų	11,011.00	58	:
	Measles.	2 2 4 2 5 2 5 1 5 1 5 1 5 1 5 1 5 1 5 1 5 1 5	392	:
Feet.	Тгеастовис.	110100000000000000000000000000000000000	92	4.5%
Flat Feet.	Observation.	251 251 251 251 251 251 251 251 251 251	208	12.3%
Knock Knees.	-упелетет.	2148867665211431	92	%2.+
Knock	Observation.	16 6 6 6 6 6 6 7 7 7 12 12 13 13 14 14 14 14 14 14 14 14 14 14 14 14 14	156	9.5%
	Bad.		9	%60.0
rition.	Fair.	### ### ##############################	212	12.5%
Nutr	Good.	112 88 92 93 93 115 70 66 66 66 66 70 71 71 88 88 88 88 88 88 88 88 88 88 88 70 70 70 70 70 70 70 70 70 70 70 70 70	1,085	64.5%
	Excellent.	16 16 16 17 17 18 18 18 18 18 18 18 18 18 18 18 18 18	381	%9.55
Enlarged Tonsils.	Тгеастепт.	Hag 4	31	1.8%
Enla	Observation.	38 8 8 1 1 2 1 3 3 8 8 8 1 1 2 1 3 1 8 8 8 1 1 1 2 1 1 1 1 1 1 1 1 1 1 1 1	422	25%
Enlarged Glands.	Тгеагизенг.	1001 1 10 10 10 10 10 10 10 10 10 10 10	30	1.78%
Em	Observation.	4 4 8 8 8 8 8 9 8 1 1 1 4 8 9 8 9 8 9 8 9 8 9 9 9 9 9 9 9 9 9 9	475	28.2%
	Not Immunized.		25	1.5%
	Dental Caries.	11.03.7.7.8.1.1.1.1.2.3.7.7.3.1.1.1.1.2.3.7.7.3.1.1.1.1.1.1.1.1.1.1.1.1.1.1.1.1	건	7.50,
	Occasional Examination.	#\$\$\$\$\$\$\$\$\$\$\$\$\$\$\$\$\$\$	73	:
	Subsequent Examination.	100 8 57 73 8 8 5 7 8 8 5 7 7 8 8 5 7 7 8 8 5 7 7 8 8 5 7 7 8 8 5 7 7 8 8 5 7 7 8 8 5 7 8 8 7 8	951	:
	Parents.	2333211123662	336	:
	First Examination.	6556611188844788 65586111888444788	733	:
	Sessions.	55555555555555555555555555555555555555	141	:
		Woolloomeoloo Forest Lodge North Sydney Surry Hills Paddington Redfern Marrickville Kingsford Mosman Herne Bay Waverley Newtown Erskineville Katoomba	Totals	

Pigeon Toes.

Sixteen kindergarten children and ten day nursery children were found to be pigeon-toed. Corrective exercises and good shoes were ordered and they were kept under observation.

Enlarged Adenoids and Tonsils and Cervical Glands.

As the poliomyclitis epidemic prevented the hospitals from operating on tonsils and adenoids over a lengthy period of the year there was a considerable increase in the numbers of enlarged tonsils and cervical glands which were kept under observation.

At the kindergartens, enlarged cervical glands were found in 836 children; 110 were referred for treatment. After a period of observation of more than six months, 98 out of 786 cases of enlarged tonsils and adenoids were referred for medical or surgical treatment.

At the day nurseries enlarged cervical glands were found in 475 children; 30 were referred for treatment. After prolonged observation 31 out of 422 cases of enlarged tonsils and adenoids were referred for treatment.

Tonsillitis.

The 10 children at the kindergartens and the 10 at the day nurseries who were suffering from tonsillitis when examined have also been included in the figures for enlarged tonsils and glands above.

Otitis Media.

Twelve kindergarten children and 9 day nursery school children had aural discharges. All were referred to an ear, nose and throat surgeon at the Children's Hospital Out-patients.

Strabismus.

Twenty-two kindergarten children and 10 day nursery children suffered from some degree of strabismus and were referred to an ophthalmic surgeon for treatment.

Bronchitis.

Twenty-four kindergarten children and twenty-nine day nursery children were found to be suffering from bronchitis and, where necessary, were referred for treatment.

Heart Murmurs.

In 16 kindergarten children and 12 day nursery children it was found during a routine examination that a mitral systolic murmur was present. Each of these cases was very carefully investigated for signs of rheumatism or any other disease which might be the cause of the murmur. In several of the cases the children had suffered a recent attack of measles but in others no cause could be found. In these cases the murmur disappeared after some months. Only one case could be attributed to rheumatism.

Anaemia.

Blood examinations were not done but 15 kindergarten children and 6 day nursery school children were considered to be exceptionally pale and were ordered iron therapy. Those who did not respond were sent for investigation and treatment at a hospital.

Urticaria.

This is more prevalent in the summer months though a common occurrence all through the year. At the kindergartens 45 children suffered from a severe degree of this condition and 28 at the day nurseries.

Umbilical Hernia and Protruding Umbilicus.

Umbilical hernia is one of the commonest abnormalities found amongst pre-school children. Twenty-four of the kindergarten and 27 of the day nursery children were found to have this condition. In addition, 10 of the kindergarten children and 9 of the day nursery children had an umbilicus that was protruding but not definitely herniated.

Absence of Director.

In 1950 I was awarded an overseas Travelling Fellowship by the World Health Organisation to study administrative techniques and practices concerning Maternal and Child Health. During my absence in the latter part of the year Dr. E. C. Wallace was Acting Director of Maternal and Baby Welfare.

Acknowledgments.

Baby Health Centres.—I wish to express my appreciation to the local government authorities, the local branches of the Country Women's Association and other citizens' committees for the valuable support given by them to the establishment, replacement and main finance of Baby Health Centres. Since the inception of the 1944 policy the local authority provides the site for the centre and 50 per cent. of the cost of erecting and equipping it, and maintains the centre when established. Nursing service is provided completely by this Department.

This policy has called for considerable expenditure of funds by Country Branches and the willingness with which such financial responsibility has been undertaken by the Association has done a tremendous amount towards furthering the Baby Health Centre service throughout the State.

Tribute to Nurse Inspectors and Nursing Staff and Clerical Officers.—I would also like to pay tribute to the loyal and co-operative manner in which the Nurse Inspectors and Clerical Officers have carried out their duties at Head Office and to the splendid work done by the Baby Health Centre Sisters throughout the State.

Voluntary Organisations Organising Day Care for Pre-school Children.—Thanks and appreciation to the administrative officers, the directors, matrons and committees are offered by the Department for their co-operation in maintaining the health service for the children.

Medical and Administrative Staff of the Division of Maternal and Baby Welfare.—I would like to express my appreciation to the Acting Director, the Senior Medical Officer, the three Medical Officers and the Administrative Officers for their interest and effective liaison with all branches of the activities of the Division which has contributed materially to the successful extension of the work.

The appreciation of the Division is extended to the administrative staff at Head Office, and the other Branches and Divisions with which we have worked throughout the year.

E. TUBERCULOSIS.

REPORT OF THE DIRECTOR OF TUBERCULOSIS FOR THE YEAR ENDED 31st DECEMBER, 1950.

Staff.

Director of Tuberculosis for New South Wales.—Dr. Marshall Andrew, M.B., Ch.M.

Deputy Director.—Dr. John Hughes, M.B., Ch.M.

- 1 Typiste.
- 1 Male Clerk.
- 1 Female Clerk.
- 2 Messengers.
- 13 Visiting Nurses.

Notifications.

The total notifications of all forms of tuberculosis during the year 1950 were 1,787, representing an increase of 146 for the year when compared with 1,641 cases for 1949.

Deaths.

Deaths from all forms of tuberculosis during 1950 numbered 671 compared with 769 for the year 1949, representing a decrease of 98. The death rate per 100,000 population was 20.86, the lowest ever recorded in New South Wales.

Clinics.

Eleven clinics operated throughout the year, and all clinies and hospitals dealing with the treatment of tuberculosis are functioning on a satisfactory basis.

X-Rays.

The total X-Rays at Clinics in the Metropolitan District for the year is shown in the following statement.

Total Metropolitan Area Clinic X-Rays, 1950... 36,230 Total Metropoliatn Area Clinic X-Rays, 1949... 32,141

Increase.... 4,089

X-Rays at Clinics in the Newcastle District for 1950 were 2,170—the same number as for 1949.

The Six Day Private Group X-Ray Service is continuing with very satisfactory results, and retains the popularity of the general public as is illustrated by the following figures:

Combined Group X-Rays for the year 1950 18,250 Combined Group X-Rays for the year 1949 17,723

Increase 527

Lectures and Addresses.

Lectures and addresses were given at various City and Suburban areas, also at Newcastle and in country districts.

The Division was represented by exhibits at the Mudgee and Orange Agricultural Shows.

Vaccination.

B.C.G. Vaccination has been undertaken at Royal North Shore Hospital, Canterbury District Hospital, Albion Street Clinic, Red Cross Clinic, Waterfall Sanatorium and Randwick Auxiliary Hospital.

Notifications, 1950.

TABLE I.—Showing the Age and Sex Incidence of the Cases of Pulmonary Tuberculosis notified during the year 1950.

Age Group.	ge Group. Metropo Combi Sanite Distri Mea Popula 1,711,5		ined Combined ary Sanitary ict. District. in Mean ation Population		Broken Hill Combined Sanitary District. Mean Population 31,020		Mitchell Health District. Mean Population 127,260		Richmond-Tweed Health District. Mean Population 119,030		South Coast Health District. Mean Population 174,920		on .	Remainder of State. Mean Population 795,622		Whole State. Mean Population 3,224,892								
	М.	F.	т.	М.	F.	T.	М.	F.	T.	М.	F.	т.	м.	F.	т.	М.	F.	т.	М.	F.	т.	м.	F.	т.
Under 1 year	3 5 11 92 149 129 175 159 86	2 5 11 125 147 85 48 38 15	5 10 22 217 296 214 223 197 101 1,285	1 1 6 7 13 15 20 7	3 12 9 7 7 7 5	1 18 16 22 22 27 12	 1 2 4 4 2 	 1 2 	2 2 4 4 4 2	1 .:. 2 2 9 7 3 4 4	1 4 7 3 1 3 19	$ \begin{array}{c} 1 \\ 1 \\ 2 \\ 6 \\ 16 \\ 10 \\ 4 \\ 7 \\ 4 \\ \hline 51 \end{array} $	1 3 4 5 4	 4 1 1	 1 7 5 5 5	 3 4 11 9 9 7	 4 9 6 3 1	 7 13 17 9 12 8	2 3 7 26 27 20 38 23 146	$ \begin{array}{c} \vdots \\ 17 \\ 31 \\ 16 \\ 2 \\ 4 \\ 5 \end{array} $	3 3 24 57 43 22 42 28	4 8 17 111 199 193 231 234 133	2 10 11 164 208 122 58 55 27	6 18 28 275 407 315 289 289 160

TABLE II.

Showing the Number of Deaths from All Forms of Tubereulosis during the year ended 31st December, 1950.

	Males.	Females.	Total.
Respiratory System	461	173	634
Meninges and Nervous System	13	8	21
Other	10	6	16
Total	484	187	671

TABLE III.

Showing the Age and Sex of Persons whose Deaths from Pulmonary Tuberculosis were notified during the year ended 31st December, 1950.

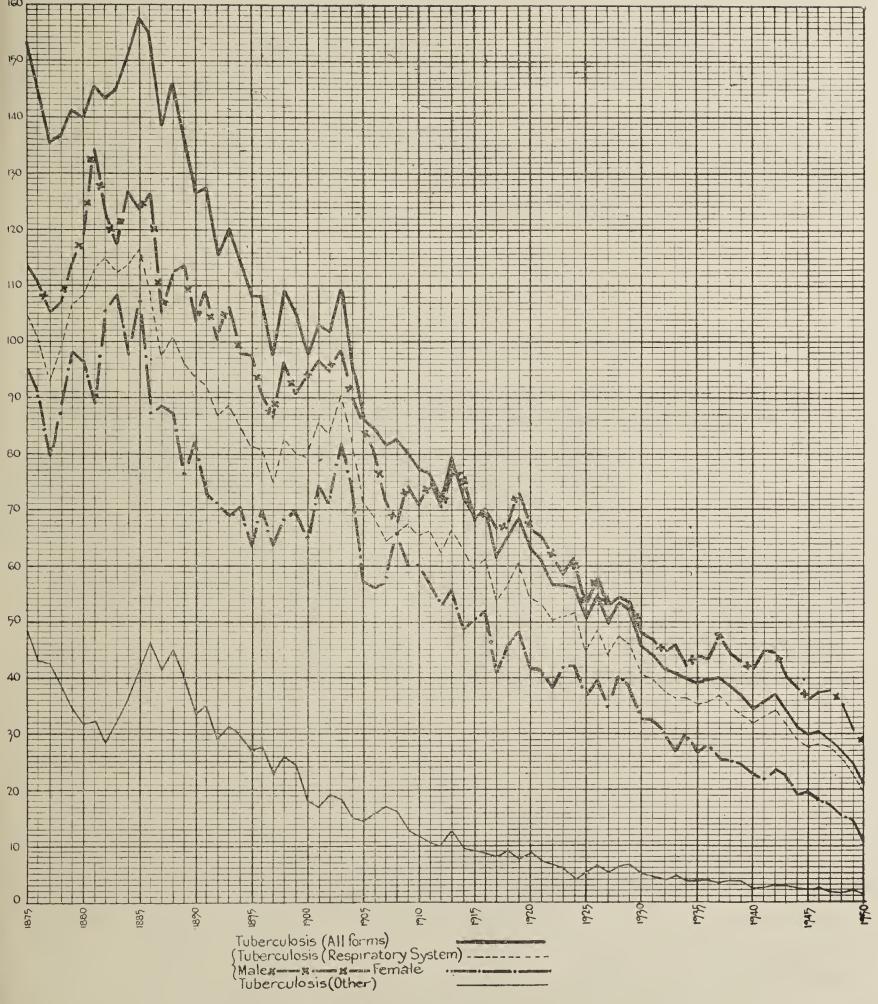
Particulars not available from Commonwealth.

Statistician as at 14th February, 1952.

(As from 1st January, 1952, records are being kept in Division whereby information for Table III will be readily available early in subsequent year.)

GRAPH 15.

Tuberculosis—Annual Death Rate per 100,000 of the Population in New South Wales, 1875–1950.



From 1950 all death rates are compiled according to the VIth International Classification.

Table IV.—Showing Institutional Accommodation available for Patients suffering from Pulmonary Tuberculosis.

	(F. co. of Ch. o. Do. o.)	N	umber of Be	ds.
Sanatoria and Hospitals.	Type of Cases Received.	Male.	Female.	Total
1. Waterfall Sanatorium (under Government control)	Moderately advanced and advanced	135	88	223
2. Randwick Auxiliary Hospital (under Government control)		80	70	150
3. Queen Victoria Homes (subsidised)—				
Thirlmere	Minimal and moderately advanced	•••	76	76
Wentworth Falls	Minimal and moderately advanced	54	•••	54
4. Red Cross Society (subsidised)—		* 0		
"Bodington" at Wentworth Falls	Minimal and moderately advanced	100		100
"Malahide" at Pennant Hills	Far advanced	10	11	21
Eva Hordern Hospital at Strathfield		•••	12	12
5. R. T. Hall Sanatorium	All types minimal	•••	16	16
6. Private Hospitals (approximately)	All types minimal	•••	•••	69
7. Repatriation Department—	A11 4	0.0		0.0
Prince of Wales Hospital	All types minimal	88	•••	88
Lady Davidson Home	All types minimal	276	•••	276
8. Lideombe State Hospital		30		30
9. Lourdes Hospital, Killara			19	19
10. Rankin Park Chest Hospital	All types	25	25	50

Table V.—Showing Number of Patients receiving Institutional Treatment for twelve months ended 31st December, 1950.

Queen Victoria Sanatorium, Wentworth Falls.	Queen Victoria Sanatorium, Thirlmere.	Bodington Sanatorium, Wentworth Falls.	Waterfall Sanatorium.	Red Cross Malahide Sanatorium, Pennant Hills.	R. T. Hall Sanatorium, Hazelbrook.	Randwick Auxiliary Hospital.
	64	107	262	22	12	154
48	73	166	175	26	9	122
43	80	170	182	26	15	127
53 50·74	$\begin{array}{c} 57 \\ 62 \cdot 12 \end{array}$	102 100	255 265	22 22·96	9 7·8	$149 \\ 151 \cdot 63$
	Victoria Sanatorium, Wentworth Falls. 48 48 43 53	Victoria Sanatorium, Wentworth Falls. Victoria Sanatorium, Thirlmere. 48 48 48 73 43 80 53 57	Victoria Sanatorium, Wentworth Falls. Victoria Sanatorium, Sanatorium, Wentworth Falls. Sanatorium, Wentworth Falls. 48 64 107 48 73 166 43 80 170 53 57 102	Victoria Sanatorium, Wentworth Falls. Victoria Sanatorium, Sanatorium, Wentworth Falls. Sanatorium, Wentworth Falls. Waterfall Sanatorium. 48 64 107 262 48 73 166 175 43 80 170 182 53 57 102 255	Victoria Sanatorium, Wentworth Falls. Victoria Sanatorium, Sanatorium, Wentworth Falls. Sanatorium, Wentworth Falls. Waterfall Sanatorium. Sanatorium. Pennant Hills. 48 64 107 262 22 48 73 166 175 26 43 80 170 182 26 53 57 102 255 22	Victoria Sanatorium, Wentworth Falls. Victoria Sanatorium, Sanatorium, Wentworth Falls. Sanatorium, Wentworth Falls. Waterfall Sanatorium. Sanatorium. Pennant Hills. Malahide Sanatorium, Hazelbrook. 48 64 107 262 22 12 48 73 166 175 26 9 43 80 170 182 26 15 53 57 102 255 22 9

AVERAGE RESIDENCE IN SANATORIA AND HOSPITALS.

Table VI.—Showing the Average Residence in Days and Condition on Discharge from Sanatoria and Hospitals of Patients under Treatment for period of twelve months ended 31st December, 1950.

Condition on Discharge.	Queen Victoria Sanatorium, Wentworth Falls. Queen Victori Sanatorium, Thirlmere.			orium,	Sanat	ngton orium, rth Falls.		erfall orium.	Mala Sanat	Cross whide orium, t Hills.	Sanat	. Hall orium, brook.	Randwick Auxiliary Hospital.	
	No. of Patients.	Average Residence in Days.	No. of Patients.	Average Residence in Days.	No. of Patients.	Average Residence in Days.	No. of Patients.	Average Residence in Days.	No. of Patients.	Average Residence in Days.	No. of Patients.	Average Residence in Days.	No. of Patients.	Average Residence in Days.
1. Arrested (A) 2. Quiescent (Q) 3. Much Improved	21	315-47	5 45	214·8 317·24	$\frac{2}{76}$	1,425 247		4,115	1	381		•••	•••	•••
(M.I.)		398·76 198 239·8 43·0	13 8 4 5	439·61 312·5 30·25 27·2	33 11 13 5 3	286 236 237 326 523	65 73 22	495 461 656	3 4 3 1 14	253 448·2 185·2 113·0 366·4	20 3 	7·1 ₇ 	30 18 2 76	678·53 130·72 210·5 321·62

TABLE VII.

	Queen Victoria Sanatorium, Wentworth Falls.					Queen Victoria Sanatorium, Thirlmere.					Red Cross Sanatorium, Bodlugton, Wentworth Falls.													
Condition on Admission.			Condi	tion or	ı Disch	arge.				Condition on Discharge.				Condition on Discharge.										
	A.	Q.	M.I.	I.	s.	w.	D.	Total.	A.	Q.	M.I.	1.	s.	w.	D.	Total.	A.	Q.	M.I.	ſ.	s.	w.	ъ.	Total.
L1T1		6 6 1 	5 6 2 	1 1	1 2 1 1	 		8 14 1 12 3 2 3	2 1 2 	30 ::: 11 	2 4 1 5 1	3 3 1 	3 1 	1 2 2 		12 40 1 24 1 2	 2 	18 31 4 21 	9 11 8 2 1 2	4	3 5 3	2 1 1 	1 1 1	30 53 4 40 5 2 9
Totals		21	13	3	5	1		43	5	45	13	8	4	5		80	2	76	33	11	13	5	3	143

TABLE VII.

	Waterfall Sanatorium.						Red Cross Malahide Sanatorium, Pennant Hills.					R. T. Hali Sanatorium, Hazelbrook.												
Condition on Admission.			Condi	tion o	n Discl	iarge.				Condition on Discharge.							Condition on Discharge.							
	A.	Q.	м.1.	I.	s.	w.	D.	Total.	A.	Q.	M.I.	I.	s.	w.	D.	Total.	Α.	Q.	M.I.	1.	s.	w.	Ъ.	Total.
L1T1 L2T1 L1T2 L2T2 L3T1 L3T2 L1T3 L2T3 L3T3		 1 2 2 		1 12 6 13 32 1	5 5 4 59 		 1 17 4	1 17 12 20 110 5		1	1 1 	1 1 1 3 				2 1 2 1 2 3 2 14			17 2		 3 			17 3
Totals		5		65	73		22	165		1	3	6	1	1	14	26		•••	19		4		•••	23

TABLE VII.

	Randwick Auxiliary Hospital. Condition on Discharge.										
Condition on Admission.											
	Α.	Q.	M.f.	I.	s.	w.	D.	Total			
L1T1				 1		•••		 i			
1T2	•••		•••			•••		4			
3T1 3T2	•••			10 1	6 1	"i	4	21			
.2T3	•••		•••	1 15	2 7	ï	71	3 94			
Totals				30	18	2	76	126			

F. INDUSTRIAL HYGIENE.

REPORT OF THE DIRECTOR DIVISION OF INDUSTRIAL HYGIENE FOR THE YEAR ENDED 31st DECEMBER, 1950.

Divisional Staff.

Director.—C. J. Cummins, M.B., B.S., D.P.H. (appointed 27th February, 1950).

Medical Officers.—T. L. Dunn, M.B., B.S., D.P.H., D.T.M. and H.; V. E. M. Sheppard, M.B., B.S.

Chief Scientific Assistant.—H. E. Rayner, B.Sc.

Scientific Assistants.—H. M. Whaite, B.E.; J. L. Sullivan, F.S.T.C.; C. L. Cullen, B.Sc., B.Ec. (resigned 27th November, 1950).

Laboratory Assistant.—W. J. Brown (resigned 6th April, 1950); S. G. Szeghy (appointed 16th August, 1950).

Clerical Officer.—Vacant.

Stenographer.—Mrs. M. Hill.

Introduction.

There was a marked increase in the amount of work carried out by the Division during the year. This was due largely to its functions becoming more widely known and appreciated by both employer and employee organisations. One satisfactory trend during the year was the increasing tendency for employers to request advice on matters of industrial hygiene. It is hoped to accelerate this trend with suitable publicity.

Import restrictions have resulted in an increasing industrialisation in New South Wales, and medical industrial hazards which previously were not apparent are now becoming more real. It is hoped that the occurrence of these hazards will be prevented by co-operation of management with this Division, particularly when installing new plant or prior to the commencement of new processes.

Under section 7A of the Factories and Shops Act, 1912, it is incumbent upon any person erecting a factory, or carrying out structural alterations or additions to an existing factory, to submit plans and specifications for approval to the Department of Labour and Industry and Social Welfare. Arrangements have been made with the Acting Chief Inspector of that Department for the submission of such plans to this Division, for advice regarding potential medical hazards and the adequacy of proposed preventive measures. It is hoped that this Divisional function will expand during the coming year, and that it will result in the elimination of many medical industrial hazards which otherwise would occur with increasing industrialisation.

During the year a very close liaison was maintained with the Department of Labour and Industry and Social Welfare, through the medium of the special liaison officer of that Department, Mr. W. Slade. As a result the medical industrial problems encountered by the various factory inspectors throughout the State have been notified quickly to the Division, and corrective measures have been facilitated. The cooperation and harmony which exists between this Division and the Department of Labour and Industry and Social Welfare, are due in no small measure to the efforts of this special liaison officer and the Acting Chief Inspector of Factories, Mr. H. Bartlett.

The Division still acts as the advisory body to the Department of Mines on the problems of dust suppression and ventilation in mines. During 1950 four scientists were trained in dust counting by this Division for the Joint Coal Board. The appointment of these officers will not interfere with the existing relationship between the Division and the Department of Mines, as the duties of the above officers are largely on a research basis to prepare data for the Joint Coal Board.

In the annual report for 1949, mention was made of the proposed health survey in the Gas Industry in New South Wales, as requested by the Royal Commission of Inquiry into the Gas Industry, 1949. This survey is well advanced and preliminary reports on certain sections of the Australian Gas Light Company and the North Shore Gas Company have been submitted. Reference will be made to these findings in a later section of the report. It is hoped to complete the survey by March, 1951.

Four members of the Division attended the I.L.O. Conference of Experts on Pneumoconiosis held at Sydney in February, two as observers (Whaite and Sullivan) and two as advisers (Cummins and Rayner). The recommendations of the Conference and the Director's comments thereon have been conveyed to the Director General of Public Health in an earlier report.

During 1950 the Division was represented on the following committees of the Standards Association of Australia:—

- (1) Statistics of Industrial Accidents (Mr. C. Cullen).
- (2) Paints and Varnishes (Mr. J. Sullivan).
- (3) Protective Occupational Clothing (Mr. H. Rayner).

- (4) Code of General Principles for Safe Working in Industry (Dr. C. J. Cummins).
- (5) Safety Standards Co-ordinating Committee (Dr. C. J. Cummins).
- (6) Refrigeration Sectional Committee (Dr. C. J. Cummins).
- (7) Refrigeration Sectional Committee (Revision sub-committe No. 2) (Dr. C. J. Cummins).

The Director was also a member of the Committee on Industrial Hygiene, the National Health and Medical Research Council of Australia.

This report is a summary of the more important investigations carried out and includes tables showing the number of cases of lead poisoning, occupational dermatitis and pneumoconiosis seen during the year. It will be divided into the following sections:—

Inorganic Elements and Compounds.

Organic Compounds.

Occupational Dermatitis.

Mining and Dusty Trades.

Ventilation and Lighting.

X-Rays and Radio-active substances.

Constitutional Factors.

Caisson Workers and Divers.

Table I gives a comparison of work carried out in 1950 as compared with 1949.

Table I. Comparison of Work 1949–1950.

	1949.	1950.
Medical examinations	418	074
Blood counts	221	$\begin{array}{c c} 874 \\ 458 \end{array}$
X-rays	98	344
Factory inspections	Not	160
	recorded.	
Coal mine investigations in days	29	3 0
Investigation of ventilation in picture		
theatres	9	10

Inorganic Elements and Compounds. Lead Poisoning.

During the year 200 employees in contact with lead were examined at the Division of Industrial Hygiene, with the following results:

Lead poisoned		17
Lead absorption		25
Normal or diseases	not related to lead	158

Fifteen of the twenty-five cases of lead absorption indicated a dangerous exposure to lead. Two deaths from nephritis were notified to the Division as being attributed to lead.

The occupational distribution of these seventeen cases of lead poisoning, as compared with those of 1949, is given in Table II below.

Table II.
Distribution of Lead Poisoning by Trade.

Industry.	1949.	1950.	Occupation.	1949.	1950
Accumulator Battery Manufacture.	9	11	Moulder Paster Mixer Handling dry plates	3 1	1 1 1 2
			Oxide manufacture Lead reclaiming Group burner Separator	5 	3 1 1 1
Engineering	1	1	Welder Sheet metal wor·kr	•••	î
Smelting of metals	1	1	Lead smelter	î	1
Electrical trades	1	ī	Battery maintenance	i	1
Painting	4	$\frac{1}{2}$	House painter Ship painter	4	1
Glass manufacturer Adventitious exposure.	1	 1	Batch mixer Electrician	"i …	1

Lead poisoning is as yet not a notifiable disease in New South Wales and the figures obtained in Table II relate only to a limited group of employees engaged in lead trades in the metropolitan area of Sydney. No statistics are available for any other portion of the State, and undoubtedly the incidence of lead poisoning is higher than indicated. Even with the figures available, on a population basis the occurrence of lead poisoning in New South Wales compares unfavourably with the number of cases notified in England during 1948. Preliminary discussions have been held regarding the advisability of medical notification of this disease, as a complement to industrial notification as an accident under section 38 (3) of the Factories and Shops Act, 1912.

The system of remote control of certain lead trades by stippled cell counting at the Division was continued during the year. The industries involved are accumulator battery manufacturers in the metropolitan area, one glass works, one ore smelting factory and one manufacturer of printing inks. Similar services were also carried out by the Divisional medical officers for the New South Wales Department of Railways, and the Electrolytic Refining and Smelting Company at Port Kembla. The number of routine stippled cell slides counted during the year was 5,087. Further arrangements have been made with several small battery assembly plants for a quarterly medical inspection by the Divisional staff.

The Lead Hazard in Copper Ore Refining.—A large copper smelting and electrolytic refining plant on the South Coast was surveyed to determine the hazard from fumes in the smelter section. Here crude metallic sulphides are converted into metallic copper. The first step in this process is treatment of the concentrates in a blast furnace to remove major impurities. Charging is done from the top of the furnace, and tapping of the slag and copper matte from the forehearth at the base of the furnace. The sulphide in the copper matte is then oxidised by an air blast in a rotary converter, leaving blister copper of 95 per cent. purity. Slag and copper ore are removed from the converter in separate tipping operations. During the various steps of this process, fumes are copious and spread throughout the building. The density of these fumes and their sources of origin are illustrated below (illustrations 1-4).

These fumes consist of a complex mixture of about twelve substances of which the most important constituents from the viewpoint of industrial hazards are lead, arsenic and sulphur dioxide. Atmospheric analyses at various parts of the process are set out in Table III.

TABLE III.

Atmospheric Contamination during Copper Refining.

Position and Operation.	Lead mg. per c. metre.	Arsenic mg. per c. metre.
1. General atmosphere of converter building		
without rolling over of converter—		
(a) near centre of shop	0.058	
(b) near converter operator	0.030	
2. Alongside moulds after pouring in centre		
of obvious heavy fumes	0.019	0.0016
3. Eastern end of shop near centre line of		
building during rolling over of converter		
for inspection and tipping of slag	0.286	•••
4. Near charging area of blast furnace	2.020	0.993
5. Platform alongside tapping hole of blast		
furnace during tapping of 3 ladles of		
copper matte	0.174	0.033
6. Crane driver's cabin	0.169	0.055

As the table indicates conditions at different times and locations are very variable, and on the basis of atmospheric analyses alone it would be difficult to assess the hazard from lead and arsenic. Medical and haematological examinations and lead urinary estimations did not reveal any abnormalities suggestive of lead absorption or intoxication. However, it was recommended that these fumes be controlled at their source to minimise the risk from sulphur dioxide which will be discussed under the next heading, and if this is carried out there should be no dangerous concentrations of other contaminants.

Sulphur.

Sulphur Dioxide.—Reference has been made in the previous discussion on ore smelting to the occurring of sulphur dioxide ir the fumes arising from the smelter or converter section of

a large copper ore refining plant. Table IV indicates the concentrations of this substance during the various steps of this process.

Table IV.

Concentrations Sulphur Dioxide Copper Ore Refining.

Position and Operation.	Sulphur Dioxide p.p.m.
1. Alongside moulds after pouring in centre of obvious heavy fumes	10
2. Near charging area of blast furnace	7
3. Crane driver's cabin	100

The concentration of sulphur dioxide in the crane drivers' cabin was almost irrespirable to one member of the Division undertaking the investigation, but apparently caused little concern to the crane driver, aged 73.

Advice was tended to the company as to how to reduce the sulphur dioxide concentrations from what is a potentially dangerous level to a safer margin, which automatically will also cause a disappearance of any possibility of a lead or arsenic industrial hazard.

Arsenic.

One case of mild arsenical poisoning occurred during the year, and that in a labourer working among the manufacture of insecticides.

Cyanide.

The question of chronic cyanide poisoning has been the subject of some dispute. Hamilton and Hardy in their text book on *Industrial Toxicology* (1949), quote several cases which they attribute to chronic cyanide poisoning, the symptoms being, *inter alia*, dizziness, headache, muscular weakness, nausea and lassitude. From this aspect one case investigated at the Division is of interest.

The patient was a male, aged 45, who had worked for five and a half months at a firm of hardware manufacturers, case-hardening nickel steels with cyanide. At this particular firm the cyanide tanks were unventilated. Previously he had engaged in a similar occupation for twenty years. He complained of nausea, vomiting and giddiness when working over the cyanide pots. The digestive symptoms on occasions were severe enough to cause him to seek his bed for some days. Full investigations, including E.C.G. blood count and X-Ray of the chest were negative, and physical examination did not disclose any abnormality.

Two months after his visit an inspection was made to the factory, and the furnaces and quenching pots had been hooded to a natural exhaust opening to the exterior. The patient stated that conditions were much better and since the installation of this ventilation his symptoms had progressively improved.

Mercury.

A recent article by Agate and Buckell (Lancet, September 10, 1949) on mercurial poisoning in fingerprint photography, led to a request by the New South Wales Police Department for a similar investigation among members of their fingerprinting bureau. By a strange coincidence the numbers submitting for examination in both the N.S.W. and Lancashire police force were the same, viz., thirty-two. In both cases the powder used is the same (hydrageum creta B.P.), and the method of application is similar, using a soft brush and either blowing off or brushing off the excess powder, As in Lancashire, fingerprinting is specialised, and all breaking-in offences are investigated by staff from the central bureau.

The exposure appears to be much greater in Lancashire than in New South Wales, the rate of consumption of powder in the former being 5 pounds per month, and in the latter about 1 pound per month. Agate and Buckell state that in Lancashire the pewder is "applied liberally from a well-loaded brush". Here it is applied lightly on selected surfaces only. Actual exposure to the powder here, even on a comparatively large search, would rarely exceed twenty minutes as against one-one and a half hours in Lancashire. Atmospheric mercurial contamination was determined with vigorous brushing as

described in the article, and with light brushing as practised in this State. The results were:—

Vigorous brushing (15-minute test)—2.78 mgms. of mercury per cubic metre.

Light brushing (10-minute test)—0.39 mgm. of mercury per cubic metre.

The exposure in Lancashire varied between 15 and 1,000 hours in the preceding year, with a mean exposure of 205.7 hours. This is excessive as compared with N.S.W. The exposure here in the preceding year varied from less than one hour to 244 hours, with a mean of sixty-four hours. The highest exposures—244, 187, 213, 168 hours—were incurred in "single fingerprinting" at the Bureau, and not with outside dusting. In single fingerprinting small exhibits are dusted and examined for identification at the bureau and the exposure is not comparable as regards possibility of mercurial intoxication, but they are included as such cases were included in the report of Agate and Buckell. The mercury in urine estimations have not all yet been completed, but results so far are not significantly different from those found in Lancashire, and vary from 0 to 104 microgrammes per litre. Table V gives a comparison of the two occupational groups:

Table V.

Comparison Occupational Exposure to Mercury.

Policemen New South Wales and Lancashire.

Emp Finge	n Time of bloyment erprinting artment.	Mean	timåted Exposure ding Year.	Estimated Mean Exposure of Group in Preceding 2 Weeks.			
N.S.W.	Lancashire.	N.S.W.	Lancashire.	N.s.w.	Lancashire.		
8·8 years	7·1 years.	64 hours	205 hours	1.1 hours	8-7 hours		

In New South Wales there was no evidence whatever of mercurialism. The difference between the two groups would appear to lie in the vigorous brushing used in Lancashire, together with the greater exposure in that series. Working on a basis of 0.1 mgm. of mercury per cubic metre of air as the maximum atmospheric contamination for safe working over an eight-hour day, and assuming that the air intake of a sedentary worker is 0.46 cubic metre per hour, it would require 2.1 hours' continual light brushing to reach this level, as against only eighteen minutes daily with vigorous brushing.

There does not appear to be any necessity in New South Wales to modify existing procedures or change to any other type of powder.

Nitrogen.

Nitrous Fumes.—Atmospheric pollution from nitrous fumes is becoming more evident in New South Wales with the increase in the manufacture of chemical products previously imported. Three complaints were received at the Division during the year and in one instance the employees showed evidence of affection by an irritant gas.

This occurred in a firm manufacturing chloropicrin (C Cl, NO2), and is another illustration of the dangers that may arise from inadequate plant planning and layout. In this case a saccharin plant was modified to the production of chloropicrin, and in the first stage a nitration process is carried on for the production of picric acid. From this nitration vat there was a marked escape of nitrous fumes during the peak of this process. These fumes were vented directly to the atmosphere, where they contaminated the surrounding workyard. Inside the factory nitrous fumes were also liberated by manual bucketing of the overflow nitration mixture to the filter beds, and the use of water in flushing out a drip tray. There was also an escape of chloropicrin from a faulty condensing column, and it was difficult to determine whether the employees were affected by the nitrous fumes or the chloropicrin. The question of efficient treatment of this contaminant is complicated by the financial capital of the company, and the small allotment on which the factory is built. Negotiations over a period of one year were unsuccessful in effecting improvements, and ultimately a Minister's order under Section 34 of the Factories and Shops Act, 1912, was served. Subsequently, this was held in abeyance until the company concerned investigated the possibility of importation of picric acid, as against the cost of installation of control of the ritrous fumes by scrubbing and/or recirculation.

This is a good illustration of the necessity, even from an economic viewpoint, for expert advice on the nature and control of medical hazards which may arise from new processes and plant installations, or in the modification of already existing processes.

Organic Solvents.

Benzol.

Two employees died, and a third subsequently succumbed due to injuries, from the effects of benzol while cleaning out a storage tank at a large steelworks in New South Wales. Three others were overcome by the fumes, but recovered without medical attention. The tank was one of five, each being 35 ft. long and 10 ft. in diameter, with strengthening horizontal and vertical angle irons at two points. There was one manhole for ingress and egress 10 ft. from one end. The tank had not been cleaned for ten years.

Respirators were not used and were not readily available. The safety harness was inefficient, and the strengthening angle irons were obstacles in the rescue of those overcome by the fumes. The coronial finding was accidental death, and certain recommendations were made to prevent a repetition of such an occurrence.

Twelve people were examined during the year at the Division for possible effects of benzol, but all examinations were negative.

Carbon Tetrachloride.

Routine examinations were carried out on three employees using this solvent at a naval depot. There was no evidence of any ill effects.

Occupational Dermatitis.

One hundred and thirty-four employees were examined during the year to determine the occupational basis of their skin rashes. This compares with 138 such examinations in 1949. An occupational basis was diagnosed in thirty-eight cases, and Table VI sets out the occupations involved and the suspected causative agents.

Table VI.
Causative Agents Occupational Dermatitis.

Causative Agent.	Occupation.	No. of Cases.
Cement	Storeman	1
	Tile layer	î
Acids—cresylic acid	Labourer	î
Cutting oils	Stove fitter	ī
9	Cold saw operator	î
Vegetable oils—turpentine	Carriage painter	ī
Soap	Soap packer	ī
*	Hairdresser	1
Infection	Abattoirs labourer	1
Mites	Waterside workers	7
	Tobacco storeman	1
Mineral oils—kerosene	Labourers (spraying D.D.T.)	2
	at abattoirs).	
Copra	Waterside workers	4
Primary Irritant—		
Mustard seed	Waterside worker	1
Cause unknown	Waterside workers	2
Allergy—		
Wood (Borneo maple)	Waterside workers	2
Stinkwort		
(inula graveoleus)	Labourer	1
Cause unknown	Clothing machinist	1
G.	Waterside worker	1
Straw	Waterside worker	1
Heat	Labourer	1
A	Heliographer	1
Arsenic	Pest exterminator	1
Trauma and infection	Builder's labourer Process worker	1
Water	Process worker	1
vvalue,	rood processor	1

Mining and Dusty Trades.

Radiographs of Lungs of Persons in Dusty Trades.

X-rays were taken of 344 persons who reported for examination and/or advice. Of this number 275 workers were considered to be in trades from which some lung hazards might be expected. Of these 275 workers, the lungs of 231

showed no X-ray abnormality, 18 showed increased markings, 21 nodulation and 5 tuberculosis not associated with occupation.

Table VII.
Pneumoconiosis by Occupation.

Occupation.	Normal.	Increase in linear markings.	Nodula- tion.	Tuberculosis or Suspected Tuberculosis.
Foundry moulders	9	2	4	
Foundry dressers	1	•••		
Foundry labourers Welders and boiler-	4	***	•••	• • •
makers	$\frac{2}{8}$	•••	• • •	
Sand and shot blasters	8		***	
Sandstone workers	5	• • •	4	* * *
Manganese workers	$\frac{2}{1}$	• • •	• • •	• • •
Coal and shale miners		$\frac{2}{2}$	1	•••
Metalliferous miners Pottery and brickyard	8	2	6	•••
workers Furnace (silica) brick-	1	•••		•••
layers	33	2	3	1
including ash pit workers, gas works operators and fire-				
men	95	10	•••	3
Asbestos workers	1		1	
Mica workers	19			
Woodworkers Flourescent lamp tube	1	•••	•••	•••
workers	3			• • •
Bakers and flourmillers	1		• • •	***
Bulk wheat handlers	14		• • •	•••
Textile workers	1	• • •		1
Ore millers and handlers	3	•••	1	•••
Divers and caisson workers	1	•••	1	
Rubber workers	2	• • •	•••	•••
Miscellaneous	16	•••	•••	•••
Total	231	18	21	5

Coal Mining.

Routine Dust Tests.—During 1950 investigations were carried out in nine (9) northern, ten (10) southern and two (2) western collieries. Some of these investigations, made at the request of the Department of Mines, concerned complaints of dusty working conditions underground; others were carried out in the State-owned coal mines in order to comply with General Rule 12B (8) of the Coal Mines Regulation Act, which requires dust tests in every colliery at least once every six months.

Air Movement as Calculated by Katathermometer Readings.—Several collieries were visited during the training of four Dust Research Officers for the New South Wales Commonwealth Joint Coal Board. During these visits, dust samples were taken by various instruments (e.g., Owens' dust counter, thermal precipitator, midget impinger, Watson konimotor) and the counter of t meter) and the ventilation was measured by anemometer, velometer and katathermometer. Certain discrepancies were observed between the air movements calculated from low pressure, high temperature and silvered katathermometer readings under comparable conditions. Consequently, an investigation has been commenced in certain southern collieries to determine the causes of these discrepancies. Already radiation from the surrounding strata appears to be eliminated as a possible cause of these differences, since all globe thermometer readings have shown close agreement with the corresponding air temperatures.

Miscible Oil in the Reduction of Dust Concentrations.—Tests were carried out in Cessnock No. 1 Colliery (Northern Field) to determine the efficacy for reducing dust concentrations of a miscible oil made by Mr. R. A. Harris, of Sydney. These tests were taken during mechanical loading and cutting, and comparison was made between the dust concentrations whilst using water as the spraying liquid and whilst similarly using the miscible oil diluted with water to a strength of one part in eighty. Though the comparative tests during loading and during cutting were each made in the same place, it was considered necessary to correct the counts, as far as practicable, for variation in air flow and for dust already in suspension in the air stream. The quantity of liquid sprayed, whether water or oil-water emulsion, was carefully measured and the rate found to be practically constant.

The average rise in dust concentration during cutting was 23 particles per cubic centimeter by Owens' dust counter when spraying water and 67 particles per cubic centimetre when spraying oil-emulsion. Similarly, the average rise in dust concentration during loading was 45 particles per cubic centimetre when using water and 47 particles per cubic centimetre when using oil-water mixture. Neither of these differences was statistically significant,

Mechanisation and Dust Concentrations.—Tests were also taken in association with the Joint Coal Board during the operation of the Joy Continuous Miner in Newstan Colliery, near Fassifern, on the Northern Coalfield. Dust concentrations near the machinemen were satisfactory, provided air flows over seven or eight thousand cubic feet per minute were maintained. With lower air flows (e.g., 2,500 cubic feet per minute) average dust concentrations exceeding 1,000 particles per cubic centimetre (Owens') were obtained. The generated dust clouds appeared to be rapidly diluted by the ventilating air stream and dust concentrations fifty or more yards on the return side of the machine were under 200 particles per cubic centimetre by Owens' dust counter.

Tunnelling, Metalliferous Mining and Quarrying.

Kemira Tunnel.—Towards the end of the year a preliminary examination was made of the Kemira Tunnel. This tunnel is being driven from the coastal plain south of Wollongong into the Illawarra Coast Range for a distance of about 15,000 ft. to intersect the workings of Mount Keira and Mount Kembla Collieries. It will be used for the rapid transportation of machine-won coal from these mines and will avoid rises of several hundred feet along the horizon of the seam of the usual tunnel mouths.

At the time of test the face was nearly 5,700 feet from the portal and the tunnel was being driven through dolerite. The average dust concentration at the face was 340 particles per cubic centimetre by Owens' dust counter. Since nearly half the total ventilating air (8,500 cubic feet per minute) was being recirculated, it is probable that ventilating difficulties will increase as the tunnel advances. It is, therefore, intended to retest this tunnel on future occasions.

Granite.—An investigation carried out in the Public Works Department's granite quarry, at Moruya, on the South Coast, revealed high dust concentrations (1,520 particles per cubic centimetre by Owens' dust counter) when dry drilling on the quarry floor. Since wet drilling substantially reduces the life of the drills used in this work, an exhaust hood placed near the collar of the hole and operated by air aspiration was recommended.

Quartzite.—At a quartzite quarry situated at Lake Conjola there was no mechanisation and all work was carried out manually. Average dust concentrations were highest during "barring down", i.e., when levering quartzite boulders from the face on to the floor for subsequent loading. Sometimes the average exceeded the permitted legal standard of 200 particles per cubic centimetre by Owens' dust counter. To reduce the possibility of excessively dusty conditions, it was suggested that the quartzite be hosed with water before handling, particularly before barring down.

Sandstone Exeavating.—At the request of the Chief Inspector of Scaffolding and Lifts, Department of Labour and Industry and Social Welfare, an investigation was made of dust exposure of men engaged in cutting a circulating channel through sandstone at the Bunnerong Power Station with a Siskol Channelling Machine. The work consisted of driving a channel, 6 feet x 4 feet for a length of about 125 feet, of which approximately 36 feet had been taken out.

Although a copious supply of water was directed on to the cut, mechanical ventilation was not provided, and natural ventilation was unsatisfactory.

The average dust concentration in the breathing zone of the machine operator exceeded 10,000 particles per cubic centimetre (Owens' dust counter). Under such conditions there is a great danger of workmen developing a rapid silicosis and it was recommended that the work be discontinued until efficient ventilation as outlined was installed. Action was taken as recommended and work had not been resumed by the end of the year.

Our experience has shown that, with suitable ventilation, the dust generated by the Siskol Channelling Machine can be effectively controlled.

As best os.

Manufacture of Asbestos Lagging.—During the year an inspection was made of a factory engaged in the manufacture of asbestos lagging. During this process diatomaceous earth and china clay are milled and bagged, and asbestos is disintegrated and subsequently bagged. Finally, a certain proportion of all three ingredients are mixed, the final product being bagged and transported elsewhere for processing.

In this factory mechanical ventilation was not provided to remove the dust at the point of origin. Dust counts taken at the breathing zone of the worker were 10,000 particles per cubic centimetre for diatomaceous earth and china clay, and 500 million particles per cubic foot for asbestos. The china clay used has a free silica content of approximately 18-25 per cent. Atmospheric concentrations conducive to safe working conditions for china clay of such a free silica content should not exceed 400 particles per cubic centimetre. With diatomaceous earth the position is more complicated, but it is reasonable to expect that the atmospheric contamination should not exceed the above level. Even with inert dusts there is a nuisance level above 1,800 particles per cubic centimetre. The recommended maximum allowable atmospheric concentration for asbestos is 5,000,000 particles per cubic foot.

Two employees of this factory in the past have developed a pneumoconiosis, probably a mixed silicosis and asbestosis. The latest employee examined has been at this job for five years and radiologically shows some evidence suspicious of early asbestosis.

The factory is small and employs a staff of two or three only. The reason why more have not been affected is the labour turnover and the difficulty of obtaining staff because of the obviously poor conditions.

In this case the building is unsuitable, the plant design is crude, protective devices other than masks are ineffective, and the only remedy appears to be a completely new plant and premises. Unfortunately this material is of the utmost priority in industry, including power stations now under construction, and hardship would be involved if these measures were carried out. As a temporary expedient adequate exhaust ventilation will be insisted upon, together with frequent medical examinations of the employees exposed.

There is good reason to believe that similar conditions exist in other firms using asbestos, and it is intended in the coming year to make a short survey of all such factories.

Handling of Bulk Wheat.

At the I.L.O. Conference on Pneumoconiosis held at Sydney in February, 1950, it was recommended that the I.L.O. should take steps to inquire into the possibility of controlling the grain dust associated with the handling of cereal cargoes. In May, fourteen foremen stevedores were examined by the Division with respect to the possibility of pulmonary incapacity from this cause. These employees are engaged in the supervision of loading of bulk wheat in the holds by the stevedores, and their exposure would be greatest among those working on the waterfront. Their duties are concerned mainly with the supervision of the mechanical trimmer, but all were previously wharf labourers with experience in hand trimming. The only protective devices used are either a butter muslin pad over the mouth or a stocking over the head. The efficiency of these masks varied from 4 to 18 per cent., and only the largest particles (200 microns or above) were blocked entirely.

Tests taken by the Owens' jet dust counter indicated that mechanical trimming was approximately twice as dusty as hand trimming. Table VIII gives an indication of the results obtained and also some idea of the exposure to particles below 10 microns in diameter.

TABLE VIII.

Dust Tests Bulk Wheat Handling.

	No. of Tests Taken.	Average Dust Count (particles per c.c.).	Highest Single Count (particles per c.c.).
Mechanical Trimming Hand trimming	18	439	1,092
	8	556	693
	9	216	294

Of those examined the gross exposure to bulk wheat dust varied from two to twenty-four years, with a mean exposure of 5.4 years. The work is intermittent and it is difficult to estimate the actual exposure time, but it would vary from a minimum of ten hours to a maximum of twenty-five hours per week. No analysis for free silica was carried out.

There were no cases of pneumoconiosis, and the only radiological abnormalities were two cases showing apical healed tuberculous lesions. There was some evidence of upper respiratory tract irritation. Allergic rhinitis and sneezing was complained of in four instances, and tightness of the chest and wheezing in three cases. Seven employees complained of cough with sputum disappearing after cessation of this work, and complaints of sore eyes were common. In two cases a very clear history of asthma occurring with this exposure and disappearing when exposure ceased was obtained. There is a need of more efficient respiratory protection for these workers, and it is intended in the coming year to experiment with various masks, including, it is hoped, the Scandia Air Veil Protector.

The Influence of Dust Inhalation on Chronic Respiratory Infections among Power Station and Gas Employees.

During the year a survey was commenced to determine and evaluate the medical industrial hazard associated with the distribution and production of coal gas in New South Wales. This investigation arose out of a request by the Royal Commission of Inquiry into the Gas Industry, held in 1948. During this Commission concern was expressed by the employees' representative as to the hazardous effects of prolonged inhalation of coal and coke dust, not only as regards the possible production of pneumoconiosis, but also as to its part in the etiology of non-specific chronic respiratory infections, such as chronic bronchitis, sinusitis, etc. Up to date a survey has been completed of one gas production unit. In June, 1950, an identical request was received with respect to the effects of dust inhalation on employees of a metropolitan power station. this iustance medical examinations, including X-rays of the chest, were carried out on eleven employees, selected with respect to duration of exposure and type of occupation, as those most likely to show medical disability from this cause.

The results of both these surveys have been combined in this preliminary report. It is intended to carry the survey of the gas industry into several other production units, and ultimately it is hoped that several hundred employees will have been examined.

There is a great similarity between both occupational groups. In each case employees are exposed to coal and coke dust and fly ash. The two groups differ from each other in their exposure to temperature extremes, this aspect being most prominent among the gas employees. In both groups the same standards were applied as regards atmospheric dust sampling and free silica determination.

In the medical survey the diagnosis of chronic bronchitis was not made unless the following criteria were satisfied:—

- (a) A history of onset from an acute attack or a history of previous respiratory infections such as pneumonia, sinusitis, recurrent colds, etc.
- (b) Either periodicity of cough, or chronicity of recurrences especially in winter.
- (c) The presence of sputum with muco-purulent properties either worse at night or in the mornings.
- (d) The elimination by X-ray of tuberculosis and pueumoconiosis or other specific lung diseases.

All cases not satisfying the above criteria were classified as chronic cough. No cases of early morning cough associated with smoking are included in this category. Where sinusitis was associated with bronchitis or with chronic cough, it was considered to be part of the syndrome and not classified separately. Chronic sinusitis was diagnosed clinically and any doubtful cases supported by X-ray evidence. Included also in this category were all cases of chronic post-nasal discharge.

Acute respiratory infections were not included in this survey in which all emphasis was on chronic respiratory diseases. Also eliminated were all conditious obviously not due to dust exposure, such as various types of deafness, deflected nasal septa, congenital abnormalities, etc.

In view of a recent article by Dunner, Hardy and Bagnall that sulphur dioxide inhalation may play a part in the determination of pulmonary dust disease in firemen, sampling of the atmosphere was carried out in both units at all points where it might be expected that the gas would be liberated. No trace of sulphur dioxide was detected. Similarly tests for carbon monoxide were negative at the metropolitan power station and in no case was the concentration greater than 100 parts per million at the gas production unit.

Dust exposure throughout both units was below 700 particles per cubic centimetre, except during coke discharging at the gas works where the counts varied from 1,000 to 1,800 particles per cubic ceutimetre. Exposure to this last process is intermittent, approximating about one hour per day. Chemical analyses indicated that the samples of atmospheric dust contained approximately 60 per cent. of total silica with a free content of less than 5 per cent.

Fifty-two employees were examined with a mean age of 44.5 years and a mean occupational exposure of 11.4 years. One case of pneumoconiosis due to free silica was discovered, but this man had worked for only six weeks at the Gas Company and prior to that for thirty-five years as a rock miner. This case was rejected for purposes of the survey. Two cases gave a definite history of onset of chronic bronchitis prior to this type of employment with periodicity of attacks up to the time of the survey. These were also rejected. As a result, forty-nine employees were left in whom any respiratory con-

dition present had developed during their employment in either of these two units. The mean age of this group was 44.3 years and the mean duration of occupation 11.3 years.

Results of Medical Survey.

Out of forty-nine employees examined eighteen were found to be suffering from respiratory infections, a gross rate per 100 of 36.9. No cases of pneumoconiosis or tuberculosis were discovered. Table IX indicates the numbers and rate per 100 of each type of respiratory infection.

Table IX.
Respiratory Disabilities Firemen and Gas Workers.

Type of Infection.	Number with Condition.	
Pneumoconiosis Chronic bronchitis Chronic cough All pulmonary conditions Sinusitis Rhinitis.	7	Nil 12·25 14·35 26·6 8·2 4·1
Total respiratory infections	18	36.9

Both these rates compare unfavourably with those found in American workers in 1926 by Britten and Thompson.

	Rates per 100 N.S.W. Examined.	American Rates 1926.
Total respiratory infections	36.9	8.6
Bronchitis	12.25	4.5

The nomber of employees examined at present is small and a strict statistical comparison cannot be made with the American rates, where 10,000 employees were surveyed. Furthermore, the mean age of the group examined in New South Wales as high and the incidence of respiratory disease would be greater in the older age groups. It is hoped to carry this report further when several hundred employees have been surveyed and it is then intended to dissect out figures obtained with respect to age and occupational exposure. At present all that one can say is that there does appear to be a higher incidence of chronic respiratory disease in these employees than one would expect, but this yet may prove to be a statistical fallacy.

Post-Mortem Examinations of Miners.

The results of pathological and chemical analyses of the lungs of coal miners submitted to the Division for examination are given in detail in Table XI.

Table XI.—Showing the Pathological Findings and Chemical Analysis of the Lung Specimens of five (5) Coal Mine Workers examined in the year 1950.

				- 775					V-100-0-0-0-0-0-0-0-0-0-0-0-0-0-0-0-0-0-				
					mmes pe: f dried lu		e		Content (gran	of Lungs nmes).	3		
Case No.	Age.	Pathology.	Ash.	Free and Com- bined Siliea.	Com- bined Siliea.	Free Siliea.	Carbon.	Free and Com- bined Silica.	Com- bined Silica.	Free Silica.	Carbon.	Remarks,	
	COAL MINE WORKERS—NEW SOUTH WALES—SOUTHERN COALFIELDS.												
$\frac{259}{260}$	60 40	No evidence of pnenmoconiosis Commencing very early pneumo- coniosis.		1·1 3·3	0·5 1·7	0.6 1.6	6·0 17·0	$0.245 \\ 0.91$	0.095	$\begin{bmatrix} 0.15 \\ 0.44 \end{bmatrix}$	$\frac{1.14}{4.7}$	South Bulli Colliery—28 years. Industrial history not forwarded.	
261	70	A few small nodules present— pneumoeoniosis—coal dust type— early.	36.0	3.7	1.9	1.9 1.8 43.0 0.72 0.37 0.35 8.3					8.3	Mining 40 years. Ceased 1943. Mt. Keira Colliery.	
	'	COAL	MINE Y	VORKERS	s—NEW	SOUTH V	VALES—	Norther	RN COALI	FIELDS.			
262	54	A few small nodules associated with a small amount of emphysema— early pneumoeoniosis—coal dust		3.3	1.1	2.2	23.0	0.64	0.21	0.43	4.46	Scotland to 1920. Then shiftman and contract miner—Bellbird Colliery.	
263	64	Some black pigmentation—no nodulation. Grey hepatisation right lower lobe.		*	*	*	*	*	*	*	*	Durham, England, to 1923. Then Richmond Main Colliery.	

* Chemical analysis not yet available.

Ventilation and Lighting.

Ultra-Violet Rays.—The shortage of building materials and labour in New South has led to the necessity of provision of prefabricated aluminium schools. These units are being erected largely in seaside suburbs because of the density of the population in those areas. As delivered, the side walls are covered with a non-reflecting coat, but the roof units are composed of polished aluminium. This substance is a good reflecting surface for both ultra-violet and infra-red rays, the glare from which is intensified by the comparative lack of tall vegetation in the sandy seaside soils, combined with the natural glare from the white sand. The attention of the Division was drawn to the occurrence of conjunctivitis in those erecting these prefabricated schools, and the nature of this unusual disturbance, occurring as it does some hours after ceasing work, strongly suggested the possibility of mild ultraviolet trauma. An inspection was made of this process and tests were carried out with various lenses. The intensity of the glare was so great that it required a dark lens (American Standards Specification No. 3 and 4) before relief was obtained. It was thought at first that these lenses might give an image too dark to allow of safe and accurate working. However,

practical tests showed that there was sufficient definition to allow safe climbing of ladders and scaffolds and to see clearly for the insertion of nails and bolts.

The possibility of deleterious effects on the eyes of children looking down from multi-storied buildings on to these roof surfaces should be borne in mind.

X-rays and Radio Active Substances.—Sixteen members were examined in 1950, mainly routine examination of luminisers and industrial X-Ray technicians, but in no instance were any ill effects observed.

Caisson Workers and Divers.—Five divers were examined on a total of thirteen occasions for medical fitness during the year. One was found to no longer conform to the usual requirements.

Constitutional Factors—Allergy.—There have been several articles written recently on wood allergy. There was one case of asthma as an allergic phenomenon to Canadian cedar investigated at the Division during the year. The employee was a Venetian blind worker.

G. SCHOOL MEDICAL SERVICE.

ANNUAL REPORT.

As at the end of 1950 the effective staff of the school medical service consisted of:—

Twenty-three full-time Medical Officers (including the Director, Deputy-Director and four Psychiatrists).

One part-time Ear, Nose and Throat Specialist.

One part-time Medical Officer attached to Newcastle Teachers' College.

One half-time School Medical Officer.

Fourteen School Nurses.

One Speech Therapist.

The establishment provided for twenty-nine full-time medical officers.

Four psychologists and four social workers were seconded from the Education Department and attached to the four child guidance clinics. Four medical officers were attached as Lecturers in Hygiene and carried out the medical supervision of students at Sydney, Balmain, Armidale and Wagga Teachers' Colleges.

In the course of the medical inspection of schools in metropolitan and country districts during the year, 93,269 children were medically examined (73,718 full examinations and 19,551 review or partial examinations).

The duties of the school nurses comprised, as usual, mainly preparatory and follow-up work in connection with the medical inspection of metropolitan schools. They also assisted in the ascertainment of hearing defects in children (audiometric testing), and in anthropometric surveys.

The medical examination of applicants for entrance to the teaching service and the Teachers' Colleges, as well as teachers for sick leave, retirement purposes, etc., was undertaken as in former years.

The four Child Guidance Clinics continued to carry out the examination and investigation of children referred by parents, the Education Department, Child Welfare Department, Children's Court, and other bodies or authorities. The No. 3 Clinic, however, devoted its whole time to the examination of boys admitted to the Metropolitan Boys' Shelter and Yasmar Hostel.

As in former years, the School Medical Service undertook also the medical examination of children referred for special reasons by the Child Welfare Department, Widows' Pensions Branch and the Education Department.

The School Medical Service continued also to be responsible for the health supervision of the pupils at the Glenfield Special School, a medical officer having paid regular visits to the school for this purpose.

The services of a part-time Speech Therapist only were available for the greater part of the year, but treatment was provided for children suffering from speech defects in some schools and at the Blackfriars Child Guidance Clinic centre.

Hearing survey clinic.—A part-time ear, nose and throat specialist was appointed at the beginning of the year to advise and assist in that section of the School Medical Service activities concerned with the ascertainment, investigation and general supervision of children suffering from deafness. Hearing surveys have been conducted in metropolitan and country districts, and particular attention has also been given to children in the Departmental opportunity deaf classes. An otological examination of all significant cases is made. Close collaboration is maintained with the Education Department in this work and especially in the matter of determining the educational requirements or problems of any particular child.

Children are referred when necessary for treatment, and where the use of a hearing aid is indicated, are referred to the Commonwealth Acoustic Laboratory.

Asthma survey.—Steps were taken this year to give advice to parents of children suffering from asthma in the effective treatment of colds and thus the control of the chronic nasal condition from which these children suffer. The results observed in the great majority of these asthmatic children, who were kept under strict supervision, leave no doubt as to the important part played by colds in their ill-health, and the good results that can be obtained by bringing these colds under control.

Bush Nursing Association.—In accordance with the arrangement which has been in existence for a number of years, bush nurses have continued to act in the capacity of school nurses in schools at or near the Bush Nursing Centre. They give health talks to the pupils and carry out a limited inspection for the detection of defects or unhygienic couditions.

New South Wales Society for Crippled Children.—Assistance is rendered to this society in various ways, including notification of physically handicapped children and examination of children in their special schools.

Far West Children's Health Scheme and Stewart House Preventorium.—Reference of suitable cases to these bodies was continued throughout the year.

H. DIVISION OF DENTAL SERVICES. ANNUAL REPORT, 1950.

The dental services of the Department of Public Health include the School Dental Service, and services to State hospitals and homes and other institutions, including State penitentiaries.

The complete establishment is—
Director of Dental Services, 1.
Dental Officers, 21.
Senior Dental Assistant, 1.
Dental Assistants, 11.

School Dental Service.

At the commencement of the year there were eleven dental officers and eight dental assistants. During the year five dental officers and two dental assistants were appointed to fill vacancies. One dental officer retired, and one dental officer and two dental assistants resigned. One dental officer was on leave for six months.

The travelling school dental clinics working in both city and country districts examined 20,358 children. Of these 7.77 per cent. were found to have naturally sound mouths, whilst an additional 19.22 per cent. were found to have sound mouths as a result of treatment. 73.01 per cent. were in need of treatment.

The clinics treated 12,446 children; 26,572 teeth were extracted; 17,886 permanent fillings and 20,178 other treatments were provided.

Dental treatment was also carried out at the Out-patients' Department of the Royal Alexandra Hospital for Children, the Far West Children's Annual Camp at Manly, and the Glenfield Special School.

Further consideration was given to the provision of a more adequate dental service by the appointment and training of dental hygienists on lines similar to those in operation in New Zealand.

Dental Services to State Hospitals and Homes.

The dental work in these institutions was being carried out by part-time dental practitioners. During the year two permanent full-time officers were appointed. These provide an improved service for Parramatta, Callan Park, Gladesville and Rydalmere Mental Hospitals. Part-time dentists are still employed in the other institutions.

Further progress has been made in providing improved accommodation and modern equipment.

Dental Services in State Penitentiaries.

The services in this section have been improved by the appointment of a permanent dental officer with headquarters at Long Bay. This officer will visit other penitentiaries and training centres periodically.

Improved accommodation and modern equipment are being provided.

SECTION II.

MEDICAL OFFICER OF HEALTH.

REPORT OF THE METROPOLITAN MEDICAL OFFICER OF HEALTH FOR THE YEAR 1950.

Metropolitan Health District.

J. GRAHAME DREW, M.A., M.B., B.Ch. (Camb.), M.R.C.S. (Eng.), L.R.C.P. (Lond.), D.P.H., D.T.M., D.T.H. (Syd.), E.R.San I

To the Director-General of Public Health, Sir.

I have the honour to present my report on the state of the public health in the metropolitan area of New South Wales for the year 1950.

It is unfortunate that owing to the delay in the publication of the relevant statistics it is impossible to present a comprehensive report together with an expression of views on trends of diseases and their possible eauses.

Within the metropolitan area there are thirty (30) municipalities and two (2) shires with a population of 1,736,510.

Births numbered 33,432.

Birth rate, 19.54.

Ratio of male to female births, 106.

Ex-nuptial births, 1,465.

Stillbirths, 639.

Death rate, 10.33. Deaths, 17,679.

Infantile mortality:-

Deaths under 1 week, 525; Rate per 1,000 live births, 15.70. Deaths under 1 month, 599; Rate per 1,000 live births, 17.92. Deaths under 1 year, 849; Rate per 1,000 live births, 25.39.

Maternal Mortality: Total natural deaths, 28. Rate per 1,000 live births, .84.

The year 1950 was marked by excessive rainfall, eausing considerable dislocation of the sanitary services in the outer suburbs where sewers have not yet been constructed. Sanitary depots became waterlogged and for a time no services were given to many ratepayers. The position was made much worse by acts of indiscipline on the part of the sanitary workers. As an outcome several councils such as Bankstown, Warringah Shire, Ryde and Holroyd have been pressed to operate their respective sanitary services on the day labour principle and to hasten on with the construction of sanitary dumps into the

It is pleasing to note that in spite of the foregoing dislocation there has not been any marked outbreak of intestinal disease, only six cases of typhoid fever having been reported.

The heavy rains also caused considerable discomfort in houses with leaking roofs, damp walls, etc. Although Municipal Health Inspectors have in all eases served the legal orders to repair and are prepared to proseente, supplies of roofing materials were not to be had in sufficient amounts to meet the urgent demands. Unfortunate citizens felt that the Department was failing in its duty, and were not at all satisfied with the explanation that their misfortunes were a reflection of the national "go slow," outlook.

Advantage was taken of every oceasion of addressing industrial groups of the necessity of thinking of and working for one another's comfort and of the value of united effort in raising the standard of health.

Although the Housing Commission is endeavouring to get on with a huge housing programme, considerable dissatisfaction has been expressed by the Health Department at the failure of the Commission to plan for the sanitary drainage of the new estates. As a result, from time to time, this Division is inundated with indignant complaints from the new tenants as to the insanitary conditions in which they are forced to live.

By courtesy of the new Minister for Housing, the Hon. C. A. Kelly, until recently Minister for Health, important talks took place between the Chairman of the Housing Commission, the Under Secretary, Department of Public Health, the President of the Metropolitan Water, Sewerage and Drainage Board, and myself. As a result of these talks, it is hoped that the fullest consideration will be given to the disposal of household drainage from housing estates in unsewered areas.

Control of Dangerous Substances.

Acting on information received, an investigation was made of an area surrounding a large chemical works at Rhodes. It was found that practically all vegetation within half a

mile of the factory was wilting or had withered. The cause was subsequently traced to a leakage in the plant for making a hormone weedicide. To obviate any further discharges from leaks, etc., small collections of water were placed throughout the plant. These were collected at regular intervals and used to moisten cotton wool in tubes, into each one of which, a cucumber seed was placed. The rate of germination and growth demonstrated the amount (if any) of weedicide present in the atmosphere.

Parathion.

As a result of investigation which showed that parathion and other insecticides of this type can now be freely purchased, an expert committee was formed consisting of officers of the Departments of Agriculture, Labour and Industry and Health (Government Analyst, Director of Industrial Hygiene and the Metropolitan Medical Officer of Health).

Later the problem was dealt with by the Federal Government. Meanwhile in New South Wales, the Under Secretary, Department of Agriculture, will deal with applications for registration of pesticides, insecticides, raticides, etc., under the powers conferred on him by the Pest Destroyers' Act, so that some measure of control may be exercised.

Infectious Diseases.

Poliomyelitis.—Three hundred and eighty-five cases were reported. These occurred in fairly regular numbers over the year with no area specially marked out. The attack rate per 10,000 population was two. The deaths numbered twenty. This disease is reported on in another portion of the New South Wales Annual Health Report.

Scarlet Fever.—Five hundred and two cases, nil deaths. The disease remains mild.

Diphtheria.—One hundred and sixty-two cases, nine deaths. Number of immunised children proved by virulence test to have contracted diphtheria was three, one of whom died.

Enteric Fever.—Six cases, one death.

Cerebro-spinal Meningitis.—Fifty-five eases, twenty-two deaths.

Typhus Fever.—Six cases, one death.

Rat eradication campaigns are continually in operation and more eouncils are realising the necessity for maintaining rat eradicators on the strength of the local health department.

Tuberculosis.—444 deaths.

The fullest assistance possible is given by local health staffs to the Division of Tuberculosis towards eradicating conditions which favour the spread of the disease.

Venereal Discases.—There has been a striking decrease in both syphilis and gonorrhoea, probably due to the use of penicillin and the sulpha drugs.

Causes of Death and Comments.

Heart disease continues to be the chief cause of death with 6,248, i.e., 3,651 per million of the mean population. Cancer is next with 2,431 deaths, i.e., 1,421 per 1,000,000. Vascular lesions affecting the central nervous system is next with 2,291 deaths, i.e., 1,339 per million of the mean population.

Health Week.

A most successful Health Week was held in Sydney from the 20th-27th October. Under the slogan "Clean Bowl Disease" a concerted drive was made towards raising the standards for handling food with hygiene in the kitchen, restaurant, etc.

The week was opened by the Federal Minister of Health, the Rt. Hon. Sir Earle Page, by means of two radio broadeasts on a national basis as all States of the Commonwealth acted in collaboration.

Metropolitan Councils.

Visits were paid according to routine or for the purpose of special inspections or enquiries. It is pleasing to note that there is a progressively greater interest being given to their respective municipal health departments by the aldermen concerned, but there is still room for great improvement.

HUNTER RIVER HEALTH DISTRICT.

Report of the Medical Officers of Health for the Hunter River Health District for the Year Ended 31st December, 1950.

Staff.

Medical Officer of Health.—Dr. J. R. Shannon.

One Senior Health Inspector.

One Senior Inspector—Pure Food.

One Supervisory Nurse.

One Tuberculosis Nurse.

One Office Assistant.

The District.

Comprises five municipalities and four shires together with the Harbour of Port Hunter.

Vital Statistics, 1950.

Population.—The population of the district at 31st December, 1950, was estimated at 269,750, while the estimated mean population for 1950 was 265,750.

Marriages.—During 1950, 2,547 marriages were celebrated in the district, equal to a rate of 9.58 per 1,000 of mean population.

With immaturity
Postnatal asphyxia and atelectasis—
Without mention of immaturity
With immaturity

With immaturity

 $7620 \\ 7625$

Live Births.—There were 5,883 live births to mothers resirent in the district, equivalent to a rate of 22.14 per 1,000 of mean population. Of these, 3,028 were males and 2,855

Ex-nuptial Live Births.—These numbered 149, equivalent to a rate of 0.56 per 1,000 of mean population. The exnuptial live births represented 2.53 per cent. of the total live births.

Deaths.—Deaths of residents numbered 2,560, equivalent to a rate of 9.63 per 1,000 of mean population. Of these, 1,451 were males and 1,109 females.

Infantile Mortality.—Deaths under 1 year of age numbered 174, equivalent to a rate of 29.58 per 1,000 live births.

Of the total number of deaths of infants under 1 year of age, 99 or 56.90 per cent. occurred within one week of birth and 112 or 64.37 per cent. within the first month. The corresponding rates per 1,000 live births for the two age groups were 16.83 and 19.04 respectively.

Still Births.—There were 105 still births to mothers resident in the district, equal to a rate of 0.40 per 1,000 of mean population and representing 1.75 per cent. of all births (live and still).

Number of Deaths.

Persons.

Males. Females.

3

2 1

30

106

15

68

174

HUNTER RIVER HEALTH DISTRICT.

Marriages, Live Births, Stillbirths and Deaths—Each Local Government Area, 1950.

	Area,	Estimated Population.		ation.		lation.			Liv	e Birtl									ths.									Stilli	,		
Municipality or Shire.	31st December,		35	Marr- iages.		Total.			Ex- iptia		A	ll Age	s.		Jnde yea:			nder nont			nd• weel		Т	'otal	1.		Ex- uptia				
	1950.	31st Mean Dcc., 1950.			м.	F.	Т.	м.	F.	т.	М.	F.	Т.	М.	F.	Т.	м.	F.	т.	м.	F.	т.	м.	F.	т.	м.	F.	т.			
Municipalities— Cessnock Maitland Newcastle Singleton Shires— Kearsley Lake Macquarie	11,541 24,238 715 506,330 185,392	13,710 21,010 134,580 4,150 32,300 49,900	20,800 133,110 4,100 31,750 48,680	$ \begin{array}{c c} 247 \\ 1,587 \\ 69 \\ 177 \\ 278 \end{array} $	227 1,359 45 469	431	300 454 2,653 92 900 1,147 130	4 40 1 16 13	30	70 1	67 117 729 27 165 277 31	180	211 1,336 47 292 457	8 37 1 25 25	31 1 19 10	5 11 68 2 44 35	1	2 3 19 4 9	5 8 47 1 16 29	3 5 26 1 9 18	2 2 17 2 8	5 7 43 1 11 26	4 6 27 5 12		11 49 3		2	"i …			
Lower Hunter Port Stephens	$\begin{array}{c c} 129,462 \\ 249,992 \end{array}$	6,740 7,360			99	108	207		3	7	38	14 19	45 57	3	2	5	1	1	2	1	1	2	1		1		1.0				
Total	1,112,470	269,750	265,750	2,547	3,028	2,855	5,883	84	65	149	1,451	1,109	2,560	106	68	174	74	38	112	67	32	99	56	49	105	1	3	4			

	Cath	1	mber of D			year of age, 1950.						
Inter- national Code No.	Cause of Death.*		Females.		Inter- national Code No.	Cause of Death.*						
*		1	<u> </u>	<u> </u>	*							
048	Infective and Parasitic Discases— Unspecified forms of dysentery		1	1	7630 7635	Pneumonia of newborn— Without mention of immaturity With immaturity						
283	Allergic, Endocrine System, Metabolic and Nutritional Diseases— Active rickets		1	1	7694	Neonatal disorders arising from maternal toxaemia— Attributed to other or unspecified						
	Disorders of the Nervous System and Sense Organs—				7695	maternal toxaemia, without mention of immaturity. Attributed to "toxaemia of preg-						
340	Meningitis, except meningococcal and tuberculous.	1	2	3	7699	nancy" with immaturity. Attributed to other or unspecified maternal toxaemia, with						
473 490	Diseases of the Respiratory System— Acute tonsilitis Lobar pneumonia	1	1	1 1	7700	immaturity. Erythroblastosis, without mention of nervous affection or immaturity.						
491 493 500	Bronchopneumonia Pncumonia, other and unspecified Acute bronchitis	2	8 2	$\begin{array}{c c} 11 \\ 2 \\ 2 \end{array}$	7701 7720	Kernicterus, without mention of immaturity. Nutritional maladjustment, without						
526	Bronchiectasis	1	•••	1		mention of immaturity. Ill-defined diseases peculiar to early infancy—						
570 571	Intestinal obstruction, without mention of hernia. Gastro-enteritis and colitis, except		1 4	1 15	$7730 \\ 7735 \\ 774$	Without mention of immaturity With immaturity Immaturity with mention of any other						
587	ulcerative, age 4 weeks and over. Diseases of pancreas		1	1	776	subsidiary condition. Immaturity unqualified						
750	Congenital Malformations— Monstrosity	1	1	2	929	Aeeidents, Poisonings and Violence— Accidental drowning and submersion						
$\frac{751}{752}$	Spina bifida and meningocele Congenital hydrocephalus		1 1	$\begin{bmatrix} 4\\3 \end{bmatrix}$		All Causes						
753	Other congenital malformations of			1								
754	nervous system and sense organs. Congenital malformations of circulatory system.		6	15	of I	n 1st January, 1950, the Sixth Revision of Diseases and Causes of Death was adopted eath.						
	Congenital malformations of digestive system.	4	1	5		Infectious Diseases.						
59	Other and unspecified congenital malformations, not elsewhere classified.	•••	2	2		heria.—Forty-four cases (three de						
	Certain Diseases of Early Infancy— Intracranial and spinal injury at birth—				during to 1949.	the year; compared with 100 case						
7600 7605	Without mention of immaturity With immaturity Other injury at birth—	6	7	13 1		t Fever.—Fifty-three cases were not the 160 cases in 1949.						
$7610 \\ 7615$	Without mention of immaturity With immaturity Postnatal asphysia and atelectasis—	4 3	2	4 5	Typho	id Fever.—Four cases notified du						

5 4

deaths) were notified ases (two deaths) in

notified in 1950 com-

Typhoid Fever.-Four cases notified during the year compared with one case in 1949.

Encephalitis Lethargica.—No cases notified.

of the International Lists ted for elassifying causes

(iv) Mental Hospitale

Infantile Paralysis.—Ninety-five cases (eight deaths) were notified during the year compared with ten cases (one death) in 1949.

Cerebro-spinal Meningitis.—Seven cases were notified during the year compared with six cases in 1949.

Puerperal Infection.—One case was notified during 1950, and one case was notified in 1949.

Leprosy.—One case (one death) was notified during the year, and one case was notified in 1949.

Pulmonary Tuberculosis.—One hundred and twenty-two cases (twenty-five deaths) were notified during the year compared with 130 cases in 1949 and 110 cases in 1948.

Private Hospitals.

Number of Beds.-M. and S, 59; Lying-in, 50.

Number of Midwifery Nurses.—Number registered in 1950—Nil; visits of inspection made by nurse inspector—42.

Number of Attendances at Chest Clinic.—There were 8,793 attendances at the chest clinic in 1950 as compared with 1,996 in 1949. New patients in 1950 totalled 1,063, compared with 996 in 1949.

B.C.G. immunisation of the staff at Royal Newcastle Hospital was commenced late in 1949. In July, 1950, immunisation of child contacts was commenced. Twenty-eight children and fifty-nine staff members were immunised during the year.

General Notes.

Poliomyclitis.—The year opened with the threat of an outbreak of poliomyclitis. A campaign was undertaken by this office to make the medical, nursing and hospital services alert to the possibilities of the outbreak. A film, "Poliomyclitis, Diagnosis and Management", was obtained from the Federal Film Library and exhibited at all hospitals and to all medical practitioners.

Actually the disease did not assume epidemic form till October, though a few cases occurred during the earlier months. In October there were thirteen cases; in November, 41; in December, 37 cases occurred.

Tuberculosis.—Immunisation of persons found negative to the Mantoux Test was carried out by the Chest Clinic at Royal

Newcastle Hospital during the year.

The State Director of Tuberculosis visited the district with a view to the implementation of an anti-tuberculosis campaign throughout the district, but the campaign did not get

beyond the preliminary planning stage.

Typhus.—Two cases of Murine typhus occurred in the vicinity of a produce store in West Maitland. A previous case occurred in this neighbourhood in 1948. Vigorous antirodent measures were taken and no further case occurred.

Vaccination Against Smallpox.—The possibility of the advent of Variola major from overseas became evident in May. A survey was made of suitable buildings for use as vaccination centres, and in June the members of the health inspectorial staffs of the district councils were vaccinated together with the M.O.H. and staff.

Typhoid Fever (including Paratyphoid).—Two cases of typhoid fever, one fatal, were notified from a children's homo in Newcastle. Rigid control of sanitation together with immunisation by T.A.B. prevented further cases. A member of the staff, who left the institution at the time of the first infection, was an intermittent carrier.

The third case for the year was that of a young woman who contracted the disease outside the area.

The fourth case was that of an infant of 15 months of age, who contracted Paratyphoid B. The source of infection remained a mystery. The infant was treated in her own home with Chloramphenicol and made an uninterrupted recovery.

Health Services in the District.

(a)	Put	vic Hospitals—eight.	
			Beds
		Royal Newcastle Hospital	278
		Mater Misericordiae	219
		Maitland District	158
		Cessnock District	121
		Wallsend District	106
		Kurri Kurri District	95
		Dangar Cottage (Singleton)	36
		Convalescent Home (New Lambton)	35
		Total Beds	1,062
	(ii)	Maternity Hospital.	0.0
	` ′	Western Suburbs Maternity	98
- ((iii)	Infectious Diseases Hospital.	
,	, 111)	William Lynne Block, Newcastle	156

	to the second se	291 952
	Morisset	201
	(v) Sanatorium for Tuberculosis.	102
	(vi) Maternity Blocks in Public Hospitals. Kurri Kurri District	10
	Cessnock Maitland Mater Misericordiae	22 30 20
b)		
,	NumberBeds—	13
	1 M. & S	59 50
;)		
	Newcastle Municipality— Full-time: Newcastle. Hamilton. Mayfield. Adamstown. New Lambton.	
	Part-time: Carrington. Stockton. Mayfield West. Waratah.	
	Wallsend. Municipality of Maitland— Full-time: Maitland. East Maitland.	
	Municipality of Singleton— Full-time: Singleton.	
	Shire of Port Stephens— Part-time: Raymond Terrace.	
	Shire of Kearsley— Full-time: Cessnock. Kurri Kurri. Part-time: Abermain. Weston.	
	Shire of Lake Macquarie— Part-time: Cardiff. Boolaroo. Toronto. West Wallsend. Swansea. Dora Creek.	

Total, ten full-time elinies, fourteen part-time elinies.

Water Usage.

The water supplied by the Hunter District Water Board during 1949, compared with year 1950, was drawn from the following sources:

	1949	1950
Chichester Storage Reservoir	3,590,491,000 galls.	3,618,553,000 galls.
Tomago Sand Beds	3,356,765,000 ,,	3,533,053,000 ,,
Walka Storage Reservoir		
Nelson Bay.	3,572,000	24,888,000

Sewerage Service—Hunter District Water Board.

Forty-four thousand one hundred and sixty-eight premises are now connected to the Board's sewers, as compared with 42,838 in 1950. During 1950 the following new connections were made—

Newcastle Division
Maitland Division
Cessnock Division 143
As at the 30th June, 1950, the following properties were
rested by the Board in respect of water supply, VIZ.:
Premises (connected)
Premises (not connected)
Lands (connected)
Lands (pot connected)
Lands (not connected) 13,650
Total Properties

Immunisation against Diphtheria in 1950.

A summary of the activities of the various clinics is given below:

	Children munised. 1,197
Royal Newcastle Hospital not	available
Cessnock Municipal Council	86
Maitland Municipal Clinic	130
Maitland Hospital Clinic	39
Singleton Municipal Clinic n	o return
Kearsley Council Clinic	143
Lower Hunter Shire Clinic	
Lake Macquarie Shire Clinic	

Pure Food Act.

Particulars of work performed under the Pure Food Act, 1908-1944, for year ended 31st December, 1950 are shown hereunder:

This work includes inspection of food, supervision of all premises where food is prepared or sold, and compliance with the legal provisions as set out in the Act and Regulations.

Inspections of Premises totalled 890—two unclean premises, one breach Regulation 77.

Seizure and Destruction of Deteriorated Foods.—1 ton 11 cwt. 2 qrs. and 5,064 tins assorted foods.

Milk Samples.—One hundred and thirty-two samples submitted for analysis. Fifteen below standard.

Food Samples.—Two hundred and thirty samples submitted for analysis, twenty-one below standard.

Total Prosecutions.—Thirty-nine.

Total Fines and Costs—£124 (Fines).

Local Government Act.

Nightsoil and garbage removal services were performed in a reasonably satisfactory manner. Complaints were received principally in regard to missed services. Depots were maintained in a satisfactory state. In Lake Macquarie shire it was found necessary to move towards acquisition of larger and more remote nightsoil depot sites. A survey was made of the shire and four localities selected, each to be serviced by one depot of extensive acreage.

Rapid development is occurring in the unsewered outskirts of the City of Newcastle, resulting in need for extension of scavenging services and creating problems in regard to sullage waste disposal.

Seventy-eight applications for septic tanks were approved during the year. Building activity in unsewered areas adjacent to Newcastle has resulted in numerous enquiries regarding suitability of sites for septic tank installation.

Coal companies have continued to carry out a policy of septic tank sewage in conjunction with improvements to miners' pit top amenities.

Unhealthy Building Land.

Sixty-one clearances were issued in respect of land which had been raised. One new area was notified during the year. The Department's surveyor proceeded with investigation of low-lying areas in Lake Macquarie shire.

Noxious Trades.

Thirty-four noxious trades were licensed.

A reasonable standard of repair and cleanliness was maintained and no complaints were received.

General Administration.

SOUTH COAST HEALTH DSTRICT.

Report of the Medical Officer of Health, South Coast Health District for the year ended 31st December, 1950.

Staff.

Dr. A. J. Geoffroy, M.B., Ch. M., D.P.H., D.T.M., D.T.H., Medical Officer of Health.

Mr. R. C. Turner, Senior Health Inspector.

Miss A. P. Graham, Typiste-Stenographer.

To the Director General of Public Health,

Sir,—I have the honour to present a report on the health conditions of the South Coast Health District for the year ended 31st December, 1950.

Staff Changes.

There were no staff changes during the year.

Local Authorities.

The South Coast Health District comprises thirteen municipalities and shires as stated hereunder:—

Municipalities.—Bowral, Camden, Campbelltown, Gerringong, Jamberoo, Kiama, Shellharbour, City of Greater Wollongong.

Shires.—Mittagong, Shoalhaven, Sutherland, Wingecarribee, Wollondilly.

Description.

The boundaries of the South Coast Health District extend in the north along the southern shores of the Georges River, westward to the Warragamba river where it joints the Mitchell Health District. The Pacific Ocean forms the eastern border of the district from the Georges River in the north to Durras Water in the south. The western border extends from the Main Dividing Range along the boundaries of the Wollondilly, Shoalhaven Shires to Currowan Creek.

The district is watered by the Shoalhaven, Clyde, Wollondilly, Wingecarribee and Nepean rivers. Within its boundaries are the catchment area of the Sydney Water Supply with dams and reservoirs at Nepean, Avon, Cataract and Cordeaux

The coastal range separates the narrow coastal strip of land from the tablelands.

The Hume and Princes Highways traverse the district from north to south. Other important roads connecting the two highways are from Heathcote to Liverpool, from Bulli Pass through Appin to Camden, from Mount Keira to Picton and from Albion Park to Moss Vale and Bowral. Further south, the Nowra-Kangaroo Valley Road and the Nowra-Braidwood Road afford access from the coast to inland areas.

From Stanwell Park to Wollongong a scenic road of great beauty gives an alternate route to tourists visiting the South Coast.

The chief towns are the City of Greater Wollongong, Sutherland, Nowra, Bowral, Moss Vale, Camden, Campbelltown, Mittagong, Picton and Kiama. Many tourists resorts and places of interest are to be found within the district; the National Park, Lake Illawarra, Jervis Bay, the Kangaroo Valley, Burragorang Valley, and the Wombeyan Caves.

The South Coast Health District is a centre of the dairying and pastoral industries. The chief dairy cattle centres are in the Camden and Gerringong-Jamberoo districts, whilst the pastoral areas are mainly on the tablelands. From Coalcliff to Dapto coal mining is an important industry. Heavy industry is carried out in the Port Kembla district south of the City of Wollongong and has a most important bearing on the present and future development of the South Coast district.

Vital Statistics, 1950.

Population.—The population of the district at 31st December, 1950, was estimated at 181,920, while the estimated mean population for 1950 was 174,920.

Marriages.—During 1950, 1,204 marriages were celebrated in the district, equal to a rate of 6.88 per 1,000 of mean population.

Live Births.—There were 4,183 live births to mothers resident in the district, equivalent to a rate of 23.91 per 1,000 of mean population. Of these, 2,117 were males and 2,066 females.

Ex-Nuptial Live Births.—These numbered 153, equivalent to a rate of 0.87 per 1,000 of mean population. The ex-nuptial live births represented 3.66 per cent. of the total live births.

Deaths.—Deaths of residents numbered 1,506, equivalent to a rate of 8.60 per 1,000 of mean population. Of these, 914 were males and 591 females.

Infantile Mortality.—Deaths under 1 year of age numbered 105, equivalent to a rate of 25.10 per 1,000 live births.

Of the total number of death of infants under 1 year of age, sixty-three, or 60.00 per cent., occurred within one week of birth and eighty-one, or 77.14 per cent. within the first month. The corresponding rates per 1,000 live births for the two age groups were 15.06 and 19.36 respectively.

Still Births.—There were sixty-eight still births to mothers resident in the district, equal to a rate of 0.39 per 1,000 of mean population and representing 1.60 per cent. of all births (live and still).

South Coast Health District.

Marriages, Live Births, Stillbirths and Deaths—Each Local Government Area, 1950.

		Estim Popula				Live Births.									Dea	$_{ m ths}$.								St	illbi	oirths.					
Municipality or Shire.	Area, 31st December, 1950.	December,	31st December,	31st December,	31st eember, 31st	Mean	Marr- iages.		Total.			Ex- Nuptial.		All Ages.			Under 1 year.			Under 1 month.			Und 1 we			Tota		otal.		Ex- Nuptial	
		1950.		1950.		M.	F.	T.	М.	F.	Т.	М.	F.	T.	М.	F.	T.	м.	F.	т.	м.	F.	т.	M.	F.	т.	М.	F.	т.		
	Acres.									1						1				1		1									
Municipalities— Bowral Camden Campbelltown Gerringong Jamberoo Kiama Shellharbour Wollongong, Greater	50,929 77,043 20,110 40,468 2,548 38,244	3,930 4,390 8,190 970 970 2,460 4,210 74,310	4,340 8,010 950 970 2,430 4,040	40 30 2 7 29 13	44 30 89 12 11 27 41 820	39 30 83 13 7 27 42 768	83 60 172 25 18 54 83	7 1 1 1 2 25	5 1 6 2 4 24	2 7 1 2 6	19 23 50 5 4 17 16	16 13 21 1 3 8 10 249	35 36 71 6 7 25 26 623	•••	1 2 1 1	3 3 5 1 3 1	2 2 3 1 1 	 1 2 1 	2 3 5 1 2 	3	1 1 6	2 1 4 2 20	1 2 16	1 3 15	2 5 31	1	1	1 2			
Shires— Mittagong Shoalhaven Sutherland Wingeearribee Wollondilly	$ \begin{array}{r} 1,151,573 \\ 91,520 \\ 340,754 \end{array} $	5,710 14,520 44,450 8,210 9,600	14,260 40,800 8,010	$\begin{bmatrix} 122 \\ 207 \\ 37 \end{bmatrix}$	43 201 615 75 109	195	$1,207 \\ 165$	12 15 2	3 10 23 3	22 38 5	26 88 193 43 56	21 53 126 29 41	47 141 319 72 97	1 8 11 3 5	14 1	4 11 25 4 9	1 6 10 2 4	3 3 11 	4 9 21 2 6	1 4 8 1 4	1 3 10 2	2 7 18 1 6	3 11 3 2	1 4 4	1 7 15 3 4	• • • •	1	 1 			
Total	2,994,156	181,920	174,920	1,204	2,117	2,066	4,183	69	84	153	914	591	1,505	63	42	105	51	30	81	39	24	63	38	30	68	2	2	4			

Causes of Death of Infants under one year of age, 1950.

Inter-		Nu	mber of I	eaths.
national Code No.	Cause of Death.*	Males.	Females.	Persons
053 061	Infective and Parasitic Diseases— Septicaemia and pyaemia Tetanus		1 	
253 273	Allergie, Endoerine System, Metabolie and Nutritional Diseases— Myxoedema and cretinism Diseases of thymus gland	1 1	•••	1 1
340	Disorders of the Nervous System and Sense Organs— Meningitis, except meningocoecal and tuberculous.	3	2	5
491 500	Diseases of the Respiratory System— Bronchopneumonia Acute bronchitis	 1	4	4 1
539 560	Diseases of the Digestive System— Diseases of oesophagus Hernia of abdominal eavity without	 1	1 1	$\frac{1}{2}$
561	mention of obstruction. Hernia of abdominal cavity with	1		1
571	obstruction. Gastro-enteritis and colitis, except ulcerative, age 4 weeks and over.	1	1	2
600	Diseases of the Genito-urinary System— Infections of kidney	1		1
705	Diseases of the Skin and Cellular Tissue— Erythematous eonditions		1	1
751 754	Congenital Malformations— Spina bifida and meningocele Congenital malformations of eirculatory	$\frac{2}{2}$	$\frac{2}{2}$	4 4
755 756	system. Cleft palate and hare lip Congenital malformations of digestive	1 1	 1	$\frac{1}{2}$
757	system. Congenital malformations of genito-	1		1
759	urinary system. Other and unspecified congenital mal- formations, not elsewhere classified.	1	3	4
	Certain Diseases of Early Infaney— Intracranial and spinal injury at birth—		4	_
$\frac{7600}{7605}$	Without mention of immaturity With immaturity	1	$\frac{1}{2}$	5 3
7620	Postnatal asphyxia and atelectasis without mention of immaturity.	5	1	6
7630	Pneumonia of newborn, without mention of immaturity.	1	1	2
7690	Neonatal disorders attributed to "toxaemia of pregnancy" without	1	•••	1
7700	mention of immaturity. Erythroblastosis, without mention of nervous affection or immaturity.	1	1	2
7710	Haemorrhagic disease of newborn— Without mention of immaturity	3		3 1
7715 7720	With immaturity	1 1	ï	$\frac{1}{2}$
7730 7735 776	infaney— Without mention of immaturity With immaturity Immaturity unqualified	1 6 18	1 1 14	$\frac{2}{7}$ 32
931	Aeeidents, Poisonings and Violenee— Exeessive heat and insolation	1		
551	All Causes	63	42	105

^{*} From 1st January, 1950, the Sixth Revision of the International Lists of Diseases and Causes of Death was adopted for elassifying eauses of death.

Office Accommodation.

On the 29th September, 1950, the offices occupied by the South Coast Health District since its inception—January, 1946, were exchanged for offices occupied by the Housing Commission on the first floor of the building. The exchange was carried out at the request of the Housing Commission, and not this department. Negotiations to effect this exchange were carried on over a period of fifteen months.

During the month of October, necessary alterations including lighting, plumbing and painting of the new offices were carried out.

Notifiable Diseases.

There were 117 cases of infectious diseases notified for the year 1950, including 6 deaths, compared with ninety-three cases and three deaths in 1949.

Diphtheria.—Twenty-seven cases; 0 deaths—compared with 16 cases, and 2 deaths notified in 1949.

Scarlet Fever.—Forty cases;—compared with 65 cases in 1949.

Cerebro-spinal Meningitis.—Eleven cases; 5 deaths—compared with 5 cases and 1 death in 1949.

Poliomyelitis.—Thirty-nine cases; 1 death—compared with 6 cases in 1949.

Encephalitis Lethargica.—No cases—compared with 1 case in 1949.

Puerperal Fever.—No cases—compared with no cases in 1949.

Poliomyelitis.—There was a greater number of cases of poliomyelitis notified in this health district during the year 1950. This was to be expected as being part of the general increase in the number of cases notified in New South Wales. The incidence of poliomyelitis throughout the State reached epidemic proportions particularly towards the end of the year. In this district, quarterly notifications were as follows:—

January-March—11 cases.

April-June—9 cases.

July-September—12 cases.

October-December—7 cases.

It should be noted that seven cases of poliomyelitis occurring in the City of Greater Wollongong during December, 1950, were not notified to the Health Department in Wollongong till January, 1951.

Of the cases notified in this district, nineteen occurred in the shire of Sutherland and eight in the City of Greater Wollongong.

It will be seen that these two Local Government areas accounted for the majority of notified cases. Both areas are more densely populated than the rest of the district and being popular holiday resorts there is an influx of tourists from other parts of the State.

Diphtheria.—There would appear to be a large increase in the number of diphtheria cases notified. However, eleven cases occurred in the Local Government areas of Campbelltown and Sutherland from which areas infectious disease figures for the whole year were notified for the first time to this office since their amalgamation with the South Coast Health District.

Diphtheria Immunisation Campaigns.

A summary of the number of children immunised is shown in the following table:—

Couneil.	Number of Children immunised.	Number of Children receiving reinforeing doses.
City of Greater Wollongong Shire of Sutherland Municipality of Bowral Municipality of Shellharbour	286 215 12 31	7 90 2 4
Total	544	103

In addition, thirty-one children received an initial injection but did not complete the full course.

The immunising agent used was P.T.A.P., except in the Shire of Sutherland, where Diphtheria Prophylactic (Formalinized Toxoid) was preferred.

Tuberculosis.

During the year 1950, eighty-two cases of tuberculosis were notified, as compared with forty-six cases in 1949. Of these, fifty-two cases, including sixteen deaths, occurred within the City of Greater Wollongong area.

The Anti-Tuberculosis Clinic established at the Wollongong District Hospital in October, 1949, has been operated most successfully. Dr. Marshall Andrew, Director of Tuberculosis, supervised the operation of the clinic throughout the year. Sister J. Booler was in charge of the clinic and carried out the district visiting. The establishment of the clinic has led to a thorough investigation of contacts and results in unsuspected cases of tuberculosis being diagnosed.

Number of attendances at Clinic-1,525.

Number of new cases—176.

Number of new contacts—259.

Number of old cases—165.

Number of old contacts—142.

Number of X-ray examinations—766.

Medical Examinations.

During the year 1950, sixty-five medical examinations were carried out at this office on behalf of the Public Service Board and Maritime Services Board.

Health Education.

Information on health matters was given to representatives of the press and other callers throughout the year.

Booklets and pamphlets on health were distributed on request to medical practitioners in the district and to many other persons.

Noxious Trades Act.

During the year sixty-three inspections of noxious trades premises were carried out.

Applications for licenses under the Noxious Trades Act, 1902-1944 were received:—

 Pig-keepers
 42

 Fat-extractors
 38

 Poultry-farmers
 7

 Knackers
 2

 Gut-scrapers
 2

During the year licenses for the trades of fat-extractor and pig-keeper were not recommended by the Board of Health in respect of premises occupied by Dorahy Bros., O'Briens-road, Figtree, Wollongong, owing to the premises not conforming

to the requirements of the regulations under the Act. Later in the year new buildings were erected and licenses were recommended for approval in connection with the premises.

Warnings were issued to licensees of other noxious trades premises to remedy unsatisfactory conditions and maintain their premises of all times in a clean condition in conformity with the requirements of the Act.

Water Supplies.

Three investigations of town water supplies were made during the year. Chemical and bacteriological samples of water were collected from two other water supplies and forwarded to the Government Analyst and Director of Pathological Laboratories for analysis and examination respectively. Appropriate advice on water supplies was given concerning supplies investigated.

Septic Tanks.

An increase in building activities in the South Coast Health District particularly in the City of Greater Wollongong and the Shire of Sutherland has resulted in a substantial increase in the number of applications for the installation of septic tanks. During the year 282 inspections of sites for proposed septic tanks were made compared with 186 in 1949. The increase in percentage being 51.6 per cent.

Technical advice regarding septic tank construction, disposal of effluent, etc., is frequently given to builders, architects and other persons. This has resulted in the plans of installations of septic tanks submitted to this office being more closely in accordance with departmental practice.

Four inspections of existing septic tanks were also made. Where necessary instructions were given by this office to abate nuisances arising out of defective conditions found to be present.

Sewerage.

The towns of Moss Vale, Bowral, Mittagong, Camden, Campbelltown and Nowra are sewered and also a small portion of the City of Wollongong. An extension of sewerage to West Wollongong—Port Kembla is proposed as part of a progressive programme, but this is dependent on the supply of labour and materials and the date of completion of this work has not yet been stated.

The site for a proposed sewerage treatment works at Kiama was chosen during the year by the Medical Officer of Health in association with the Public Works Department. Three inspections of existing sewerage treatment works were made by this office.

Nightsoil Disposal.

Eight inspections of existing nightsoil depots and seven inspections of land for proposed new nightsoil depot sites were made during the year.

New nightsoil depots at Cronulla, Bundeena, Shellharbour and Picton were inspected and recommended for approved by the Board of Health.

Investigations in connection with unsatisfactory rendering of sanitary services were carried out. Where necessary instructions were given to local authorities to cause the sanitary services to be rendered in accordance with the Local Government Ordinances.

Numerous complaints have been received concerning existing sanitary services at East Fairy Meadow and Bulli. Inspections have been made from time to time and the local authority urged to exercise a stricter control of these depots. This has resulted in a great improvement in the conditions. Negotiations have been carried out throughout the year with the local authority with a view to having both these sanitary depots closed for the disposal of nightsoil as the sites are not considered suitable and are a potential danger to health.

During the year temporary stoppages in the rendering of sanitary services have occurred in the City of Greater Wollongong, shires of Sutherland, Mittagong and Wingecarribee, and the municipality of Shellharbour.

On the 17th February, 1950, a strike of the sanitary carters of the Sutherland Shire Council occurred. A compulsory conference called at the Industrial Court, Sydney, was held on the same day, necessitating the attendance of both the Medical Officer of Health, and the Senior Health Inspector. An agreement was reached by the Sutherland Shire Council, the Transport Workers' Union and the sanitary carters. The men resumed work on the 20th February, 1950.

Garbage Disposal.

Eight inspections of existing garbage disposal depots were made during the year.

Several complaints of unsatisfactory disposal of garbage, rat infestations, flies and noxious odours were received, and attended to.

Complaints.

Many complaints were received during the year relative to alleged nuisances.

In many cases these were referred to the local authorities for immediate suitable action. Investigations were carried out by this office of sixty-four complaints. The complaints were chiefly made concerning insanitary buildings, dampness in buildings, etc., drainage nuisances, smoke nuisances, road nuisances, unsatisfactory sanitary and garbage services.

Pure Food Act.

Throughout the year, pure food inspectors from head office visited the South Coast Health District and conducted numerous inspections of food premises under the Pure Food Act, 1908. Many prosecutions arising out of these inspections were conducted and fines were imposed for breaches of the Act and Regulations.

Additional inspections of hotels and bakery premises were carried out by this office. A prosecution in connection with dirty bakery premises conducted by local authority necessitated attendance at court by a departmental officer on four separate occasions. The facts in this case were proved, but the defendent pleaded extenuating circumstances and the information was dismissed under section 556A of the Crimes Act.

Tourist Camps.

During the year twenty inspections of tourist camps were made. Where considered necessary recommendations were made to councils for the improvement of the camping areas. Generally the tourist camps were found to be satisfactory. Cases of infectious diseases notified as being present at the camps proved on investigation to have occurred in persons reported sick on arrival.

General.

There has been a noticeable increase in the number of persons calling at this office during the year for information and advice regarding health matters. There has also been a considerable increase in the work of the staff of this office. This has been largely due to the full effect being felt of the addition of the municipality of Campbelltown and the Sutherland Shire to the South Coast Health District. These areas were added in September, 1949.

The work in the Sutherland Shire has been heavy owing to the unsatisfactory condition of the sanitary service for most part of the year. This service, which is very large, frequently broke down and in consequence continuous complaints by householders were made to this Department. The building activity in the area also has been far ahead of council's road construction programme, and the season generally being wet, drainage complaints from the area were frequent and numerous.

Very similar conditions have existed in the City of Greater Wollongong area where the growth of the populated disricts has extended on to low-lying areas, badly drained and without street formation. Nuisances have occurred and the drainage problems, being serious, have not been easy to remedy consequently there have been many complaints.

With the continued industrial development in the City of Greater Wollongong area and the popularity of the Sutherland Shire as a residential and tourist district, no diminution in the work of this office with regard to these areas is expected during 1951.

I would like to state my appreciation of the diligent services and co-operation of Mr. R. C. Turner, Senior Health Inspector, and Miss A. P. Graham, Typiste-Stenographer, throughout the year.

MITCHELL HEALTH DISTRICT.

Report of the Medical Officer of Health for the Year Ended 31st December, 1950.

Staff.

Medical Officer of Health, Dr. E. C. Wallace; Health Inspector, Mr. D. H. Way; Office Assistant, Miss P. M. Single.

Owing to lack of housing accommodation at Bathurst approval was given for Dr. E. C. Wallace to visit the District on a part-time basis, with headquarters at Sydney.

The Mitchell Health District is made up of the following municipalities and shires:

Municipalities.

Bathurst.

Blue Mountains, City of.

Lithgow.

Molong.

Mudgee.

Orange.

Shires.

Abercrombie.

Amaroo.

Blaxland.

Canobolas.

Cudgegong.

Gulgong.

Lyndhurst.

Oberon.

Rylstone.

Turon.

Apart from open-cut mining, which is being developed on a large scale in the Blaxland Shire, there has been little change in the general activities carried on in the district as noted in the report for 1949.

*81687—7

Vital Statistics, 1950.

Population.—The population of the district at 31st December, 1950, was estimated at 129,080, while the estimated mean population for 1950 was 127,260.

Marriages.—During 1950, 1,041 marriages were celebrated in the district, equal to a rate of 8.18 per 1,000 of mean population.

Live Births.—There were 3,094 live births to mothers resident in the district, equivalent to a rate of 24.31 per 1,000 of mean population. Of these, 1,573 were males and 1,521 females.

Ex-nuptial Live Births.—These numbered 125, equivalent to a rate of 9.69 per 1,000 of mean population. The ex-nuptial live births represented 4.04 per cent. of the total live births.

Deaths.—The deaths of residents numbered 1,233, equivalent to a rate of 9.69 per 1,000 of mean population. Of these 725 were males and 508 females.

Infantile Mortality.—Deaths under 1 year of age numbered eighty-six, equivalent to a rate of 27.80 per 1,000 live births.

Of the total number of deaths of infants under one year of age, sixty-two, or 72.09 per cent., occurred within one week of birth, and sixty-seven, or 77.91 per cent., within the first month. The corresponding rates per 1,000 live births for the two age groups were 20.04 and 21.65 respectively.

Still Births.—There were sixty-seven still births to mothers resident in the district, equal to a rate of 0.53 per 1,000 of mean population and representing 2.12 per cent. of all births (live and still).

Note.—From 1st January, 1950, portion of the former Shire of Cobbora (namely "A" Riding) was amalgamated with Gulgong Shire.

MITCHELL HEALTH DISTRICT. Marriages, Live Births, Stillbirths and Deaths—Each Local Government Area, 1950.

	Area,		mated lation.			Liv	e Birtl								Dea	ths.								St	illbi	rtlis	•	
Municipality or Shire.	31st December, 1950.	31st Dec.,	Mean	Marr- iages.		Total.			Ex- iptia		A	ll Age	s.		nde: year			nde iont			nde weel		Т	otal			Extupti	
		1950.	1950.		M.	F.	т.	М.	F.	т.	М.	F.	т.	M.	F.	т.	м.	F.	т.	м.	F.	т.	M.	F.	т.	М.	F.	T.
Municipalities— Bathurst Blue Mountains Lithgow Molong Mudgee Orange Shires— Abercrombie	6,374 802 5,152 576,905	12,720 22,840 15,800 1,780 4,370 17,010	22,440 15,390 1,750 4,340 16,690	137 161 17 68 213	232 203 29 46 222	154 208 219 23 54 196	74	14 2 4	4 13 5 4 1 8	10 27 7 4 5 20	56 162 67 10 33 80	51 113 56 10 18 62	107 275 123 20 51 142	6 6 5 1 9	7 3 7 7	13 9 12 1 16	5 1 5 9	5 3 6 5	10 4 11 14	5 1 5 8	5 3 5 5	10 4 10 13	4 7 3 2 5	3 3 9 1 1	7 10 12 3 6	2		2
Amaroo Blaxland Canobolas Cudgegong Gulgong* Lyndhurst Oberon Rylstone Turon	494,080 852,098 407,192 862,790 935,222 399,332 722,533	2,370 9,830 5,790 4,410 5,830 6,400 3,460 4,590 7,850	$\begin{array}{c} 2,340 \\ 9,720 \\ 5,760 \\ 4,390 \\ 5,760 \\ 6,340 \\ 3,410 \\ 4,550 \end{array}$	6 28 5 26 37 16 29 94	29 127 53 46 89 72 44 48 131	35 118 74 38 68 64 42 61 128	64 245 127 84 157 136 86 109 259	1 8 2 1 3 1 2 15	1 4 5 2 5	$ \begin{array}{c} 2 \\ 12 \\ 7 \\ 1 \\ 3 \\ 20 \\ \hline 125 \end{array} $	14 51 36 41 27 35 14 29 37	$ \begin{array}{r} $	20 88 63 59 48 60 23 43 58	3 1 1 5 1 5	1 2 2 1 1 2 5	5 5 1 1 2 7 1 10 86	2 3 1 4 1 4	1 2 1 1 2 3	$\begin{array}{c} 3 \\ 5 \\ 1 \\ \vdots \\ 2 \\ 6 \\ \vdots \\ 7 \\ \hline 67 \\ \end{array}$	2 1 3 1 4 1 4	1 2 1 1 1 2	2 5 1 2 5 1 6	 4 2 1 2 2 1 	 4 1 1 2 2 3 3 3	8 1 3 2 4 4 4 4 3		 2 1	 2 1

^{*} From 1st January, 1950, portion of the former Shire of Cobbora (namely "A" Riding) was amalgamated with Gulgong Shire.

Causes of Death of Infants under one year of age, 1950.

Caus	ses of Death of Infants under one y	ear o.	age, 19	
Inter-		Nu	mber of D	eaths.
national Code No.	Cause of Death.*	Males.	Females.	Persons
002 056 085	Infective and Parasitic Diseases— Pulmonary tuberculosis Whooping cough Measles	 1	1 1 	1 1 1
253 270 273	Allergie, Endocrine System, Metabolic and Nutritional Diseases— Myxoedema and cretinism Disorders of pancreatic internal secretion other than diabetes mellitus. Diseases of thymus gland	1 1	 1	1 1 1
331	Diseases of the Nervous System and Sense Organs— Cerebral haemorrhage	1		1
491 501	Diseases of the Respiratory System— Bronehopneumonia Bronehitis unqualified		1 1	$\frac{2}{1}$
570 576	Diseases of the Digestive System— Intestinal obstruction without mention of hernia.	•••	1	1 1
750	Peritonitis Congenital Malformations— Monstrosity	•••	1	1
751 754	Spina bifida and meningocele	₂	$\frac{1}{2}$	$egin{array}{c} 1 \ 4 \ \end{array}$
756	system. Certain Diseases of Early Infancy— Intracranial and spinal injury at birth—			
7600 7605 7610	Without mention of immaturity With immaturity Other injury at birth, without mention of immaturity. Postuatal asphyxia and at electasis—	1 1	1	3 1 1
7620 7625 7630	Without mention of immaturity With immaturity Pneumonia of newborn, without mention of immaturity.	5 1 1	4 1	9 1 2
7699	Neonatal disorders attributed to other or unspecified maternal toxaemia, with immaturity.		2	2
7700	Erythroblastosis, without mention of nervous affection or immaturity.	1	***	1
7710	Haemorrhagic disease of newborn, without mention of immaturity.		1	1
7730 776	Ill-defined diseases peculiar to early infancy, without mention of immaturity. Immaturity unqualified	23	17	40
780	Symptoms, Senility and Ill-defined Conditions— Certain symptoms referable to nervous system and special senses.	,		1
921	Accidents, Poisonings and Violence— Inhalation and ingestion of food (causing		1	1
924	obstruction or suffocation). Accidental mechanical suffocation in bed and cradle.	3		3
	All Causes	48	38	86

^{*} From 1st January, 1950, the Sixth Revision of the International Lists of Diseases and Causes of Death was adopted for classifying eauses of death.

Health Services in the District.

During the year, owing to shortage of staff, some baby health centres and depots were closed temporarily.

The Hospitals Commission arranged for certain hospitals to receive poliomyelitis cases—viz., Bathurst, Orange and the Blue Mountains District Hospitals.

An orthopaedic surgeon visited the country centres in the west, including Bathurst and Orange, to see poliomyelitis cases.

Local Authorities.

The Bathurst City Council was advised of the need for another health inspector for its staff. Later in the year an appointment was made.

Reports to head office on the failure of the Oberon Shire to carry out its health services satisfactorily were made throughout the year and the appointment of a full-time health inspector for Oberon Shire was recommended. No full-time health inspector has been appointed yet.

Local authorities were asked to arrange for their health inspectors to attend conferences called periodically by the Medical Officer of Health. The first conference was held at Bathurst on 26th August, 1950.

Infectious Diseases Notified for the Year Ended 31st December, 1950.

Typhoid fever, 1.

Scarlet fever, 124.

Diphtheria, 5.

Poliomyelitis, 43, including 3 deaths.

Cerebro-spinal meningitis, 3, including 1 death.

Encephalitis, 2, including 1 death.

Puerperal infection, 1.

Compared with previous years, there has been a great increase in poliomyelitis and scarlet fever notifications. Most of the scarlet fever cases occurred in Bathurst, where there was an outbreak affecting mostly school children.

No source of infection was evident, but local doctors reported a general increase in the incidence of sore throats at the time

A case of amoebic dysentry was reported at Wallerawang by Dr. Swinburn and subsequently investigated.

Housing.

The Housing Commission and private builders have not yet supplied the demand for houses.

Pure Food Act.

No pure food inspector has yet been appointed on the district staff. Periodically a food inspector from head office, Sydney, visits the district.

Noxious Trades Act.

The provisions of the Act were extended to the Lyndhurst Shire as from the 15th December, 1950.

Licenses issued in respect of each trade are as follow	s:
Pigkeeper 41	1
Fat extractor 3	3
	1
Done grander invitation in the contract of the	1
Block Boller	1
	1
Gut scraper	1

General Administration.

Local authorities have been, for the most part, co-operative. Long distances to travel over bad roads and in adverse weather conditions make contact difficult with some councils, especially Mudgee and Gulgong.

Medical Examinations.

		8
		2
Sick leave	 	1

Inspection of sanitary depots	. ~	
inspection of samitary depots	45	
Inspection of garbage depots	59	
Inspection of septic tank sites	209	
Inspection of septic tank installations	31	
Investigation of complaints	78	
Inspection of noxious trade premises	103	
Inspection of hotels	15	
Inspection of food premises	25	
Inspection of dairies	32	
Investigation of infectious disease	1	
Quarter Sessions Appeal Court	-2	day
Inspection of sewage treatment works	2	
Collection of water samples—		
Chemical	28	
Micro	28	
Inspection of sewage treatment works sites	4	
Inspection of water catchment district	1	
Investigation of Administration of Dairies		
Supervision Act	1	
Inspection, septic tank disposal area	1	
Inspection of polluted water supply	1	
Inspection of piggery	1	
Inspection of low-lying land at Kandos and		
Rylstone	1	
Inspection of boundaries proposed nightsoil		
scavenging district at Spring Hill	1	

Public Health Education.

Health displays were exhibited at the annual shows at Rylstone, Mudgee, Gulgong and Orange.

Talks were given by the Medical Officer of Health to interested groups, e.g., Mothers' Club, Bathurst Infants' School.

Press articles and broadcasts were given in assisting the campaign of the Anti-T.B. Association.

A film on poliomyelitis released by the National Film Board was distributed throughout the district for exhibition to doctors and murses at the main centres.

Tuberculosis.

Early in the year the Mobile X-ray unit of the Anti-T.B. Association commenced their western tour, entering the Mitchell Health District in February and visiting the main centres. The results of the survey are briefly as follows:

Place.	Number examined.	Percentage showing radiological evidence of pulmonary T.B.	Percentage showing radiological evidence of significant pulmonary T.B.
Springwood	414	1.72	
Katoomba	2,774	2.3	
Lithgow	5,106	1.4	0.17
Bathurst	4,653	1.1	0.08
Orange	5,604	1.2	0.08
Orange Mental Hospital	1,528	5.4	1.11
Orange EMMCO	1,087	2.4	0.18
Molong	1,083	0.83	0.46
Mndgee	2,391	1.12	0.10

The relatively high figure for the Orange Mental Hospital is worthy of note.

The Citizens T.B. League of New South Wales (Katoomba Branch) conducted a Mantoux survey of school children in the Blue Mountains district towards the end of the year. A report by the League states that of 2,380 children who were Mantoux tested 295 showed a positive reaction; the highest evidence of positive reactors being from two schools in the district (37 per cent. and 28 per cent. positive respectively).

It was noted also that the older-age group showed a greater percentage of positive reactors, e.g., of 14-15 years group, 25.7 per cent. positive. An X-ray follow-up was done of the children—incomplete unfortunately.

During the year B.C.G. vaccination of the staff at Lithgow Hospital was done.

RICHMOND-TWEED HEALTH DISTRICT.

Annual Report of the Medical Officer of Health, J. J. Donnellan, M.B., Ch.M., D.P.H., for the year ended 31st December,

This is the third annual report of the Medical Officer of Health of the Richmond-Tweed Health District. The district is situated in the far north-east corner of the State. It extends from South Grafton in the south to the Queensland border in the north, and westward to the western boundaries of Copmanhurst Shire and Kyogle Shire, the eastern boundary is the coast line extending from Yamba in the south to Tweed Heads in the north.

It comprises two cities, six municipalities and ten shires. The area is over 5,000 square miles and the population is approximately 120,000.

It is the most closely settled rural region in Australia. The industries are mainly dairying, cattle and pig raising, banana growing, sugar-cane growing and timber getting. Tropieal fruits such as pineapples, paw paws, etc., are grown in the area.

There are several popular tourist resorts along the coast extending from Yamba to Tweed Heads. These tourist resorts attract large numbers of people during the tourist season, leading to a great temporary increase in the population of the district.

The staff consists of a medical officer of health, a senior health inspector and a female office assistant. No change in the office staff occurred during the year. No food inspector has as yet been appointed to the staff.

During the year many parts of the district were visited by flood rains and considerable damage was done to crops and property and stock losses were heavy, but owing to the excellent work of the police assisted by members of the local water brigade and other organisations no serious loss of human life occurred.

Sanitary services were dislocated in many places but these were put back into operation in a very short time by the local

No increase in notifiable infectious disease occurred but many cases of influenza and pneumonia did occur.

Considering the magnitude of the disaster surprisingly little damage to public health resulted.

Vital Statistics, 1950.

Population.—The population of the district at 31st December, 1950, was estimated at 120,090, while the estimated mean population for 1950 was 119,030.

Marriages.—During 1950, 1,054 marriages were celebrated in the district, equivalent to a rate of 8.85 per 1,000 of mean population.

Live Births.—There were 3,178 live births to mothers resident in the district, equivalent to a rate of 26.70 per 1,000 of mean population. Of these, 1,682 were males and 1.496 females.

Ex-nuptial Live Births.—These numbered 100, equivalent to a rate of 0.84 per 1,000 of mean population. The ex-nuptial live births represented 3.15 per cent. of the total live births.

Deaths.—The deaths of residents numbered 938, equivalent to a rate of 7.88 per 1,000 of mean population. Of these, 542 were males and 396 females.

Infantile Mortality.—Deaths under 1 year of age numbered sixty, equivalent to a rate of 18.88 per 1,000 live births.

Of the total number of deaths of infants under 1 year of age, forty, or 66.67 per cent., occurred within one week of birth, and forty-five, or 75.00 per cent., within the first mouth. The corresponding rates per 1,000 live births for the two age groups were 12.59 and 14.16 respectively.

Still Births.—There were fifty-one still births to mothers resident in the district, equal to a rate of 0.43 per 1,000 of mean population and representing 1.58 per cent. of all births (live and still).

RICHMOND-TWEED HEALTH DISTRICT. Marriages, Live Births, Stillbirths and Deaths—Each Local Government Area, 1950.

	Amoo	Estin Popul				Liv	e Birtl	ıs.							Dea	ths.								Sti	illbiı	ths.		
Municipality or Shire.	or Shire. December, 21ct	Mean	Marr- iages.		Total	•		Ex- iptia	ıl.	A	ll Ages			nde: year			ider onth	. _		nder veek		To	otal.			Ex- upti		
		Dec., 1950.	1950.		М.	F.	т.	м.	F.	т.	м.	F.	т.	м.	F.	т.	м.	F. 1	r. 1	M.	F.	т.	м.	F.	т.	м.	F.	т.
Municipalities— Ballina Casino Grafton Grafton South Lismore Maclean Mullumbimby Ulmarra Shires— Byron Copmanhurst Gundurimba Harwood Kyogle Terania Tintenbar Tomki Tweed Woodburn Total	3,947 2,578 1,379 8,267 1,278 1,103 29,810 137,600 774,080 115,179 210,880 858,880 217,630 114,560 280,113 322,066 346,230	3,380 7,400 9,040 4,230 16,630 1,790 1,740 2,660 4,050 4,800 12,110 7,320 4,900 3,730 20,870 4,460 120,090	$\begin{array}{r} 4,160 \\ 16,360 \\ 1,790 \\ 1,730 \end{array}$	133 100 57 3122 23 42 14 31 2 80 80 10 14 171 22	17 29 18 122 31 30 46 200 119 65 51 327 73	177 177 15 104 28 44 40 173 106 48 53 279 59	113 405 34 46 33 226 59 74 86 373 225 113 104 606 132	4 1 2 7 1 3 1 11 3	1 2 10 2	33 31 11 55 10 3 3 4 15 5 4 4 31 21 5	13 25 37 23 24 15 84 34	22 26 53 19 53 7 5 2 28 14 10 7 31 14 18 10 70 17	42 555 109 45 119 18 200 8 68 22 23 32 68 37 42 25 154 51	1 2 3 3 1 1 2 6 1 1 2 3 2 2 9	7 3 1 1 1 1 1 7	1 3 7 1 2 2 10 3	1 2 1 2 1 1 1 1 2 5 5 1 1 2 2 2 2 2 2 4	2 1 1 1 1 	3 6 1 2 2 6 2 2 4 5 1 1 2 2 6 5 2 1 1 2 2 6 5 2 1 1 2 2 6 5 2 1 1 2 2 6 6 2 1 2 2 6 6 2 1 2 2 6 6 2 2 6 6 2 2 6 6 2 2 6 6 2 2 6 6 2 2 6 6 2 2 6 6 2 2 6 6 2 6 6 2 6 6 2 6 6 2 6 6 2 6 6 2 6 6 2 6 6 2 6 6 2 6 6 2 6 6 2 6 6 2 6 6 2 6 6 2 6 6 2 6 6 2 6 6 6 2 6	1 1 2 5 1 1 2 2 1	1 1 3 2 2 2 1 1 1 1 1 8	2 2 3 3 4 1 2 2 6 1 2 6 1	1 2 3 3 6 2 1 1 1 6 1 3 30	2 3 3 3 2 1 2 1 3 1 2 1	3 2 5 6 9 2 1 1 5 2 1 9 2 1		2 1 	i

Causes of Death of Infants under one year of age, 1950.

Inter-		Nu	mber of I	eaths.
national Code No.	Cause of Death.*	Males.	Females.	Persons.
212	Neoplasms— Benign neoplasm of respiratory system	1 .		1
365	Disorders of the Nervous System and Sense Organs— Erythroedema polyneuritica	•••	1	1
480	Diseases of the Respiratory System— Influenza with pneumonia	1		1
491 493 500	Bronchopnenmonia Pneumonia, other and unspecified Acnte bronchitis	•••	2 1 1	$\frac{2}{1}$
570	Diseascs of the Digestive System— Intestinal obstruction, without mention of hernia.		1	1
571	Gastro-enteritis and colitis, except ulcerative, age 4 weeks and over.	2	2	4
751 754	Congenital Malformations— Spina bifida and meningocele Congenital malformations of circulatory	₁	1 1	1 2
755 756	system. Cleft palate and hare lip Congenital malformations of digestive	<u>i</u>	1	1 1
759	system. Other and unspecified congenital mal- formations, not elsewhere classified.	•••	2	2
7600	Certain Diseases of Early Infancy— Intracranial and spinal injury at birth, without mention of immaturity.	1	 I	1
$7610 \\ 7615 \\ 7620$	Other birth injury— Without mention of immaturity With immaturity Postnatal asphyxia and atelectasis,	2 1	1 3	$\frac{1}{2}$
7630	without mention of immaturity. Pneumonia of newborn, without mention	1		1
7695	of immaturity. Neonatal disorders attributed to "toxagmia of pregnancy," with	1		1
7700	immaturity. Erythroblastosis, without mention of nervous affection or immaturity.	1	1	2
7710	Haemorrhagic disease of newborn, without mention of immaturity.		1	3
7720	Nutritional maladjustment, without mention of immaturity. Ill-defined diseases peculiar to early	1		1
7730 7735	infancy— Without mention of immaturity With immaturity	•••	1	2 1
776	Immaturity unqualified	10	8	18
780	Conditions— Certain symptoms referable to nervous system and special senses.		1	1
921	Accidents, Poisonings and Violence— Inhalation and ingestion of food causing		1	1
924	obstruction or snffocation. Accidental mechanical snffocation in bel and cradle.	1	1	2
	All Causes	29	31	60

^{*} From 1st January, 1950, the Sixth Revision of the International Lists of Diseases and Causes of Death was adopted for classifying causes of death.

Health Services in the District.

There are two full-time baby health centres, ten part-time baby health centres.

There are nine ambulance stations and three sub-stations.

There are ten public hospitals with 782 beds.

Sanitary Circumstances in the District.

It is felt that improvement in the sanitation of this district has continued during the year and further improvement will undoubtedly occur on completion of the various schemes, some of which are projected and others have actually begun.

The Rocky Creek Water Supply Scheme has not yet been completed. When it is it will be the means of supplying pure water to Lismore, Byron Bay and towns on the Lower Richmond River.

The extension of the Nymboida Water Scheme to towns on the Lower Clarence River has not yet commenced.

A commencement has been made in the work of sewering the town of Murwillumbah, and an augmentation scheme for Lismore is approved, but not yet commenced. The town of Kyogle is now sewered, but the household connections are not yet complete.

Public Health Act.

Infectious	Diseases
------------	----------

Tuberculosis	22
Diphtheria	38
Infantile paralysis	7
Typhoid fever	-
Encephalitis lethargica	—
Puerperal infection	-
Yellow fever	
Cholera	
Searlet fever	15
Cerebro-spinal meningitis	2
Typhus fever	11
Undulant fever	1
Smallpox	
Bubonic plague	

The provisions of the Act with regard to infectious disease have been found generally to receive proper attention by the local authorities.

Immunisation against Diphtheria.

During the year 1950 diphtheria immunisation campaigns were carried out by eleven out of eighteen local authorities.

There has been a decrease of over 50 per cent. in the number of cases occurring during the year over the average number of cases for the previous two years, thirty-eight (38) compared to the average of seventy-eight (78) for the previous two years. Thirty-two of the thirty-eight cases were children under the age of 14 years and of these thirty-two (32) children nine (9) of them gave a history of having been immunised against diphtheria less than five years previously. From enquiries and investigations made these nine cases were very mild.

The incidence of scarlet fever also decreased during the year from thirty-seven (37) to fifteen (15), but eleven (11) cases of endemic typhus occurred, which is an increase of 82 per cent. on the previous two years.

Seven (7) cases of acute anterior poliomyelitis occurred, six of them during the last months of the year. It would appear that the epidemic of this disease is about to spread from the southern districts to this area.

The use of B.C.G. Vaccine in this district was extended during the year and Mantoux negative nurses at Tweed District Hospital and Kyogle District Hospital were vaccinated.

It is hoped that during the coming year this vaccine will be in use at all of the public hospitals in this district.

Local Government Act.

Continued inspections have been made of sanitary depots and investigations of nightsoil and garbage removal services.

Camping areas and tourist reserves have received attention. At two of the principal tourist resorts Tweed Heads and Yamba (Harwood Shire) insufficient inspectorial work has been carried out by the local authorities. This matter has received attention and action has been taken to have additional staff appointed at Tweed Shire and a qualified health inspector at Harwood Shire.

Complaints from members of the public have received attention and where necessary the local authorities have been requested to take appropriate action in connection therewith.

Inspections have been made of licensed hotel premises in company with the licensing inspector. Recommendations in regard to sanitary matters generally have been submitted for the information and guidance of the licensing authorities.

Private and public water supplies have been investigated and samples submitted to the Government Analyst for examination and report.

At the request of this Office a sanitary survey has been carried out by officers from head office in Harwood Shire and as a result the Minister for Local Government has directed the Harwood Shire Council to appoint a health inspector for that area.

Investigations were also carried out in regard to the sanitary circumstances at Tintenbar Shire and the Municipality of Ballina. Following this investigation the Ballina Municipal Council was called upon to appoint a full-time health inspector.

Noxious Trades Act.

One hundred and seventy-five (175) Licenses have been issued under this Act for the 1950-51 Licensing period.

Inspections of these premises have been made and where necessary recommendations have been submitted for improvements to structural conditions and general maintenance. Some delay has been experienced in having structural improvements carried out owing to the shortage of material in this district.

Pure Food Act.

This Act continues to be administered from head office and periodic visits of a food inspector from head office were made during the year. It is felt that the standard of food premises in the district is not as high as it should be, particularly does this apply to food premises in outlying villages where sufficient supervision cannot be carried out under the existing arrangements.

During the year on six occasions it was found that foodstuffs were being sold in this district which were not of a standard required by the Pure Food Act. These food stuffs were found in the smaller villages of the district and had been brought from other States.

It would, therefore, appear that more frequent visits to this area should be made by a food inspector not only to the larger towns as at present, but also to the outlying towns and villages.

Health Education.

Education of the public in health matters has been given attention by means of newspaper articles and comments and broadcast talks throughout the year and especially during Health Week.

In addition, in conjunction with Casino Municipal Council a Local Health Week was held at Casino which included a health exhibition at the Casino Memorial Hall. This Department's contribution to that exhibition consisted of a general health display, a T.B. display, and a pure food display and also the showing of health films. A nurse from the T.B. Division, a projectionist and a pure food inspector from head office were present and gave assistance. The exhibition was very largely attended and I feel sure was a very potent means of spreading knowledge of health among the people.

In conjunction with this health exhibition a conference of councils' health inspectors was called by the Medical Officer of Health and this was addressed by Dr. J. R. Shannon, Medical Officer of Health for the Hunter River Health District. Matters of public health interest and importance and the latest advances therein were discussed. Films were also exhibited to the inspectors.

The Medical Officer of Health, as in previous years, lectured on hygiene to the trainee nurses at the Lismore Base Hospital as part of their course.

The work of this office has been facilitated during the year by the help and co-operation of the medical practitioners practising in the district, and particularly of the medical officer-in-charge of the Commonwealth Health Laboratory at Lismore and members of his staff.

Twenty-one (21) medical examinations were carried out during the year.

General Administration.

Mileage travelled by officers on duty:—
Medical Officer of Health—5,398 miles.
Senior Health Inspector—11,858 miles.

Sentic tanks reported una-

Inspections:-

Septic tanks inspected	50
Septic tanks inspected	36
	55
Samples of septic tank effluent submitted for	
analysis	1
Septic tank plans recommended for approval	44
	96
Inspection of butcher's shops	33
	10
Samples of water submitted for chemical	
analysis	6
Samples of water submitted for bacteriological	
examination	14
	34
	36
	26
Inspection of proposed site for swimming pool	1
	11
Proposed nightsoil scavenging districts	7
Sanitary depot sites recommended for approval	2
Inspection of proposed sanitary depot sites	6
Inspection of proposed garbage depot sites	2
	17
Inspection of racecourse, showground and sports	
	19
Sanitary services investigated	5
Garbage services investigated	5
Inspection of insanitary buildings	9
Inspection of aborigine reserves and camps	1
ı ı	16
Investigation of mosquito control	4
Inspection of rest home	1
Investigation of pollution of natural water-	
course	1
Inspection of proposed site for hospital	1
Inspection of laundrette	1
	11
*	1
Investigation of food poisoning	
*	1
Investigation of food poisoning Investigation of sale of prohibited article of food Attendance at court proceedings on behalf of	1
Investigation of food poisoning Investigation of sale of prohibited article of food Attendance at court proceedings on behalf of council	4
Investigation of food poisoning Investigation of sale of prohibited article of food Attendance at court proceedings on behalf of	

Office Routine:—
The number of letters despatched during the year 1950 was one thousand and ninety-two (1,092).

BROKEN HILL AND DISTRICT.

Report of Medical Officer of Health, J. T. Cullen, M.B., B.S., for the Year 1950.

The population of Broken Hill Municipal District in 1950 was estimated at 29,600, which represents a considerable increase when compared with that for the previous year.

The deaths for the period under review numbered 250 (males 138, females 112). There were 790 births for the twelve months comprising 383 males and 407 females.

Infectious Diseases.

The monthly incidence of notifiable infectious diseases was as follows:—

Month.	Typhoid Fever.	Scarlet Fever.	Diph- theria.	Meningo- coccal Meningitis.	Puerperal Infection.	Infantile Paralysis.
1949—						
July				•••	• • •	• • •
August	•••	• • •		•••	•••	
September		• • •	•••	•••	• • •	1
October	*.* *	•••	•••	•••	•••	•••
November	•••	•••	• • •	•••	•••	•••
December	•••	***	•••	***	***	•••
1950—						
January			• • •			•••
February			•••			•••
March		• • •	•••			
April		•••	•••	•••		•••
Мау	• • • •	•••	•••	•••	•••	***
June	•••	•••	•••	•••	•••	
Totals	Nil	Nil	Nil	Nil	Nil	1

The remarkably low incidence of infectious disease is again noteworthy. Apart from one reported case of poliomyelitis there were no cases of infectious disease. This is an improvement on the previous twelve months, and is a record case incidence for Broken Hill.

At the Anti-tuberculosis Clinic ninety-eight new cases were investigated, an increase of twenty-one on the previous twelve months. The total number of attendances at the clinic during the period under review was 446, an increase of forty-six when compared with the previous twelve months.

Details of other duties performed are as follows, the figures for the previous twelve months being shown in parenthesis:—

Post-mortem examinations at the request of the coroner—32 (17).

Attendances at court and giving evidence in police cases —25 (17).

Examinations of prisoners or of arrested persons-43 (12).

Examinations and reports on police constables re fitness for duty—20 (10).

Governmental examinations (Public Service Board, Railway Department, Education Department, etc.)—19 (27).

Visits and interviews as Medical Officer of Health—21 (30).

Vaccinations-30 (30).

SECTION III.

STATE HOSPITALS AND HOMES.

STRICKLAND CONVALESCENT HOSPITAL. Statistical Information for Annual Report Year Ending 31st December, 1950.

Visiting Emergency Medical Officer.—Dr. R. C. TRAILL.

1 -

Matron.-Miss H. McGregor.

Clerical Staff.—Mr. D. McHARG.

Trained Nurses.—Four.

Assistant Nurses.—Three.

Female Domestic Staff.—Seven.

Outdoor attendant, 1; night attendant, one; attendant cleaner, 1.

Patients Bed Accommodation.—Males, 40; females, 70; inmate workers, 21.

Remaining in Hospital, 31st December, 1949.—Twenty-eight males; 33 females; 17 immate workers.

Patients admitted during 1950	342	Females. 653 635 51	Total. 996 977 Inmate Workers 18
-------------------------------	-----	------------------------------	--

Daily Average-Males, 30; Females, 47; Inmate Workers, 18.

Maintenance and donations for the year, £948.

Patients are admitted to the hospital through metropolitan hospitals, Health Department and country doctors. Many cases of plaster and crutch infirmities who with many others are admitted here, are obliged to report frequently to the transferring hospital for X-ray, deep ray, etc. This happens sometimes for some patients three or four times weekly, owing, of course, to the ever-growing extreme shortage of beds in these hospitals. It is a regular thing for patients to be sent here with fractured limbs two or three days after the accident, and then have to report back to the transferring hospital, frequently for observation, etc. The same applies to eye and deep ray cases, and it is becoming increasingly evident that we are changing from a convalescent hospital to a subsidiary of the general hospitals.

Usual maintenance, etc., has been undertaken by the Public Works Department during the year.

LIDCOMBE STATE HOSPITAL AND HOME.

Report of Medical Superintendent for the Year Ending December, 1950.

Honorary Visiting Staff.

Honorary Staff Surgeon.—H. C. Rutherford Darling, L.R.C.P. (Lon.), M.R.C.S. (Eng.), M.B., B.S., M.D., M.S. (Loudon), L.F.P.S. (Glasgow).

Assistant Hon. Surgeon.-J. A. Lawson, M.B., Ch.M., F.R.A.C.S.

Hon. Urologists.—C. M. Edwards, M.B., Ch.M.; H. G. Cummine, M.B., B.S. and M.S.

Hon. Ophthalmic Surgeons.—A. E. Fraser Chaffer, M.B., Ch.M.; F. J. A. Pockley, M.B., B.S.; C. E. H. Beckett, M.B.; Eunice Wilson, M.B., B.S., D.OM.S.

Hon. Dermatologist.—Vacant.

Hon. Ear, Nose and Throat Surgeon.—R. E. Dunn, M.B., B.S., B.Sc.

Radiologist.—Colin R. Cole, M.B., Ch.M.

Dentist.—D. G. Brown.

Staff Administrative.

Medical Superintendent.—E. J. Brooks, M.B., Ch.M.

Deputy Medical Superintendent.-G. S. Procopis, M.B. M.R.A.C.P.

Senior Medical Officer.—S. H. Swift, M.B., Ch.B., 1925, Univ. N.Z., D.T.M. & H. London 1930, L.M. Rotunda 1935, D.R.C.O.G., Eng., 1935.

Junior Medical Officers.—A. F. J. D'Arey, L.M.S.S.A., Lond., 1927; A. H. Crowley, M.B., B.S., 1916, Univ. Melbourne; J. D. Murphy, M.B., B.S., Sydney.

Manager.-W. C. Macdonald.

Matron.—Miss A. J. Carr.

Nurses.—Forty.

Other Female Staff.—Thirteen.

Attendants .- One hundred and twenty-nine.

Other Male Staff.—Fifty-one.

No. of beds available as at 31st December, 1950.—Hospitai, 796; dormitories, 519; total, 1,315.

Daily Average Number of Patients and Inmates Resident.

1946		1,201
1947		1,137
1948	••	1,133
1949	• • • • • • • • • • • • • • • • • • • •	1,175
1950		1,173

Admissions—Discharges.

	Hospital Division.	General Division.	Total.
In Institution, 1st January, 1950 Admissions	727 1,159	420 1,134	1,147 2,293
Sections	293	243	536
	2,179	1,797	3,976
Discharges Deaths Transfers to other Sections	701 521 243	1,064 8 293	1,765 529 536
	1,465	1,365	2,830
In Institution, 31st December, 1950	742	431	1,173

Daily average numbers in residence during the year:—

Hospital Division, 701; General Division, 474; Total, 1,175

Casual Relicf.—One hundred and twenty-four indigent persons were provided with sleeping accommodation for one night, and 208 were supplied with a meal.

During the year 171 major operations were performed. Three thousand, one hundred and twenty-eight cases were examined in the X-ray department, including examination of staff as prescribed by the award made by Judge Kinsella.

Two thousand three hundred and sixty-nine specimens were examined in the Pathological Department.

Electrocardiograms were taken and reported on.

Laundry.—One million one hundred and twenty-eight thousand six hundred and eight-nine articles were laundered.

Farm.—Sale of pigs, etc., realised £789 16s. 3d.

The bakery at this hospital was closed on 30th November, 1950. However, \$20,388 lb. of bread were produced at an average cost of 1.77 pence per lb. and 33,353 lb. of cake and buns were produced at an average cost 4.03 pence per lb.

The following works were carried out by the Public Works Department during the year ended 31st December, 1950:-

- (1) Kerbing and guttering of roads near artisans' work-
- (2) Remodelling of ward kitchens.
- (3) Installation of hot water service at medical officers' residence.
- (4) Repairs to water main at hoiler house.
- (5) Repairs to floor, Ward 27.
- (6) Installation of ceiling fans in wards.
- (7) Installation of refrigeration main mess room.
- (8) Sealing off main effluent tank.
- (9) New fence at medical superintendent's residence.
- (10) Repairs to ceiling at general store.
- (11) Remodelling of kitchen at nurses' quarters.
- (12) Storage for display materials—barn building.
- (13) Enclosing of verandah—Ward 12.
- (14) Rewiring of electric circuits and installation of general purpose outlets, Ward 20.

Expenditure, 1950 (see p. 88).

LIVERPOOL STATE HOSPITAL AND HOME.

Report of Medical Superintendent for the Year Ended 31st December, 1950.

Honorary Visiting Staff.

Surgeon: J. A. Lawson, M.B., Ch.M., F.R.A.C.S.; Assistant Surgeons: N. C. Newton, M.B., B.S., F.R.A.C.S.; Justin P. Fleming, M.B., B.S., F.R.C.S.; Orthopaedic Surgeon: Neville H. Morgan, M.B., B.S., F.R.C.S.; Anaesthetist; R. V. Rickard, M.B., Ch.M., F.R.C.S., F.R.A.C.S.; Neuro-Surgeon: J. R. Tripp, M.B., B.S.; Ear, Nose and Throat Surgeon; H. A. J. Lister, M.B., B.S., D.L.O.

Staff.

Though staff shortages still persisted the position towards the close of the year showed a fair measure of improvement. Recruitment of additional female nursing personnel, though largely of the Nursing Aid classification, permitted the recommissioning of "D" Ward—a District Ward which, through inadequacy of staff, had been closed continuously since January, 1946.

Details of staff actually employed as at 31st December, 1950, are as follows, viz.—

Medical Superintendent, C. R. O'Brien, M.B., Ch.M.; Senior Medical Officer (Acting), J. J. L. McDonald, L.R.C.P.; Medical Officer, J. O. Marel, M.B., B.S.; Manager, E. C. Barrett; Matron, N. Hoare; dispenser, 2 clerks, 4 office assistants, storekeeper and assistant storekeeper, 28 nurses (including aids), chief attendant, deputy chief attendant, 30 attendants, 27 other male staff, 11 other female staff. In addition, a dental surgeon attended the institution one whole day each week.

Number of Beds and Wards.

Hospital division comprising 11 wards containing 289 beds, whilst dormitory accommodation for inmates of the home section remained constant at 446 beds throughout the year.

Admissions and Discharges.

In residence 1st January, 1950—681. Admitted during year, 2,573. Discharged, 2,184. Died, 381. Total remaining at 31st December, 1950—688. Average daily number resident—685. Average cost per occupied bed—£165 9s. 4d.

Summary of Ward Patients treated during 1950.

Section.	In	Admitted	Discharged	Died	In
	Hospital,	during	during	during	Hospital,
	1-1-50.	year.	year.	year.	31–12–50.
Cancer Wards	63	155	40	102	61
General Wards	169	227	121	177	
Total	232	382	161	279	231
District Wards	22	961	810	89	50
Grand Total	254	1,343	971	368	281

Operations.

A total of 383 operations were performed during the year, of which 258 could be classified as of a major nature.

Outpatients.

A total of 31,084 attendances were recorded during the year.

Review of Work.

Buildings.—Owing, apparently, to a planned deferment of work under this heading, little activity on the part of the Public Works Department in regard to buildings at this institution was noted during the year. The only projects worthy of mention relate to certain repair and renovation work carried out at the cottage formerly occupied by the Herdsman, and the commencement made in the last month of the year with work of a like nature at the outpatients' department building. Complete renewal of the flooring in the main dormitory block, comprising dormitories numbered 2 to 8, was commenced late in August, 1950, but was not completed at the close of the year.

Services.—The services of the institution were maintained in a reasonably satisfactory condition during the year.

Early in 1950 installation of hot water systems at several residences was carried out and the replacement of an old and outmoded main electrical switchboard, by one of modern type, in the main hospital block was effected. A commencement was also made late in the year with the complete renewal, in hardwood, of the several fire escape stairways, serving upstair Wards "C", "D", "E" and "F", whilst the relaying of about 112 feet of main sewer pipeline was also commenced towards the close of the year.

Renewal of the roadway, including kerbing and guttering, to the Cancer Division, commenced in January, was completed in April, 1950, and the installation of a control valve in the water main beyond that block was effected in the final month of the year.

Entertainments.—The immates were well provided with entertainments throughout the year, with occasional mid-week concerts, in addition to the very frequent Saturday evening variety shows, which are invariably well attended and do much to relieve the monotony of institutional life. To the promoters and artists comprising the many parties who so attend, the grateful thanks of this administration are tendered.

The weekly cinema entertainment also continued to be very well patronised throughout the year.

Visits in the near-Christmas period of representatives of such organisations as the Australian Workers' Union, Waterside worker's Union and the Ex-Imperial Soldiers and Sailors' Sub-Branch, by whom cash donations are made to their respective ex-members, towards promoting a happier Christmastide, was also a pleasing and noteworthy feature, as the year 1950 drew to a close.

Farm—Dairy and Piggery.—As in recent years it is again necessary to record with regret, that the year 1950 closed without it being possible to recommence pig-raising activities in consequence of the non-restoration, to pre-Army occupation condition, of the lands and buildings required for such project.

Gardens and Grounds.—The condition of the gardens and grounds were satisfactorily maintained throughout the year.

In respect of vegetable gardening activities, the unavailability of the services of a staff gardener for approximately the first three months of the year imposed a severe handicap, and production in this section declined considerably as a result. Guinea pigs supplied to the Microbiological Laboratory and Repatriation Hospital, Concord, for pathological purposes totalled 486 for the year.

NEWINGTON STATE HOSPITAL AND HOME. Honorary Medical Staff.

Neurologist—vacant.

Ophthalmic Surgeon—vacant.

Staff.

Medical Superintendent—J. McManamey, M.B., B.S. (Sydney); Deputy Medical Superintendent—Lottie Sharfstein, M.B., Ch.M.; Manager—Mr. V. L. Delaney; Matron—Miss A. Wilson; nurses, 70; dispenser, 1; senior clerk, 1; elerk, 1; female office assistants, 2; storekeeper, 1; female office assistant in store, 1. A dentist visits the institution fortnightly. Male staff, 36; other female staff, 31.

Admissions and Discharges.

Inmates in institution on 1st January, 1950, 422. Admissions during year, 674. Discharges, 601. Died, 73. Remaining in institution at 31st December, 1950, 422. Average daily number, 426.

Hospital Division Statistics.

To 2	
Beds available	342*
In hospital at 1st January, 1950	223
Admissions during year	101
Discharges during year	31
Died during year	70
In hospital at 31st December 1950	202

* Includes ninety-seven beds temporarily unavailable in wards closed owing to shortage of nurses.

RANDWICK AUXILIARY HOSPITAL.

Report for the Year Ended 31st December, 1950.

The following are the statistics summarising the work of the hospital during the twelve months ended 31st December, 1950.

Indoor Patients.

	Males.	Females.	Total.
Patients under treatment on 31st			3.54
December, 1949	74 72	80 50	154 122
Total treated during 1950	146	130	276
Died during 1950 Diseharged during 1950	44 27	32 24	76 51
Total died and discharged, 1950	71	56	127
Remaining in hospital on 31st December, 1950 Daily average number of resident	7 5	74	149
patients	77	75	152
deeeased patients in days	342	425	378
out-door treatment	•••	•••	95
Total number of visits made by out- door patients	•••	•••	1,614

Inmate Workers.

In institution on 31st December, 1949	10
Admitted during 1950	36
-	_
Total	46
Discharged during the year 1950	35
Remaining in institution on 31st December, 1950	11
Daily average number	11
General daily average number, including	
workers	163

Operations Performed.

Thoracoplasty	14
Phrenic crush	134
Thoracoscopy	1
Bronchoscopy	179
Abdominal and pelvic	5
•	
	333
Minor operations	103
•	
Total	436

X-ray Department.

X-ray examinations	1,873
Barium	6
Screening	460
Films used	2,093
Dental films used	138

Staff.

Honorary Staj		
Honorary	Ear, Nose and Throat Surgeons	2
Honorary	Urologist	1
Honorary	Thoracic Surgeons	2
Honorary	Dermatologist	1
Honorary	Orthopaedic Surgeon	1
Honorary	General Surgeon	1
Honorary	Consulting Physician	1
Honorary	Anaesthetists	1
Honorary	Onhthalmologist	1

— 13

Medical and Clerical:

Medical Superin	ntendent		 		
Medical Officer			 		
Junior Medical	Officers	• • • •	 		
Manager			 		
Clerks (male)			 		
Office Assistant				• • • • • • •	
			 • • • • •	• • • • • • •	

Nursing:

Matron	1	
Sub-matron	1	
Tutor Home Sister	7	
Thortae Citter	1	
Theatre Sister	1	
Nurses (female)	66	
Nurses (male)	10	
		80
		00

Domestic Staff:

Wardsmaids and Housemaids	34
Kitchenmaids	2
Kitchenmaid Cook	1
Cooks	
Seamstress	
	1

43

176

Miscellaneous:

Male Cleaners—cleaning in wards Maintenance of grounds, etc. Steam-raising plant Store Occupational Therapy Microbiologist Dispenser—female Dietitian—female	5 5 3 1 1 1 1 1
Total Staff, full-time	172
isiting Staff:	
Radiologist	1
X-ray Technician	1
Clergymen	2

Staff Shortages.

Nursing Staff	 19
Domestic Staff	
Dispenser	

The staff shortages at the end of the year were less than those as at 31st December, 1949.

Appended is a statement of the shortages:-

Total

	31-12-49.	31-12-50
Nursing Staff	23	19
Domestic Staff	2	4
Dispenser	1	1

Daily Average Number of Patients.

The undermentioned schedule illustrates the fluctuation in the number of patients in residence since the peak of year of 1942:—

1942		299.2
1943		194
1944		185
1945	• • • • • • • • • • • • • • • • • • • •	152.69
1946		123.9
1947		107
1948		115
1949		148
1950		152

WATERFALL SANATORIUM.

(1) (a)) Number	of beds	available	on 31st	December,	1950.
---------	----------	---------	-----------	---------	-----------	-------

	Males.	Females.	Total.
Patients	260	171	431
	129	19	148

	Patients.	Workers.	Total.
(b) Remaining in hospital on 31st December, 1949 Admitted during 1950 Total treated during 1950	262 175 437	128 869 997	390 1,044 1,434
Number discharged	159 23	877	1,036
December, 1950 Average daily number resident	$\frac{255}{265}$	120	375

Average residence of discharged patients in days *Total cost of maintenance and treatment of	37
Indoor Patients.	
Average daily number of inmates resident	386
*Average cost per inmate.	
Average daily number of patients resident	265
*Average cost per patient.	

Average cost per patients	
(c) Exchange Services—Lidcombe Credit £369 88 Outpatients or individuals who received treatment	s. 2d 22
	37
	74

(2) Staff as at 31st December, 1949—	Posts.	Actually Employed.	Vacant
Honorary Medical Staff	2 5 3 †44 §23 29 14	$\begin{array}{c} 2\\ 3\\ 3\\ 25\\ 20\\ 22\\ 14 \end{array}$	 2 19 3 7

^{*} Expenditure figures not yet supplied by Accounts Branch.
† Actual authorised nursing staff 50 but reduced to 44 by the employment of 6 attendants.

DAVID BERRY HOSPITAL.

Annual Report for the Year Ended 31st December, 1950.

Following are the statistics summarising the activities of this hospital during the year ended 31st December, 1950.

Indoor Patients.

	Males.	Females.	Total
Patients under treatment on 31st December, 1949	7	5	12
Admitted during 1950	277	249	526
Total treated during 1950	284	254	538
Died during 1950	12 265	6 247	18 512
Total died and discharged, 1950	277	253	530
Remaining in hospital on 31st	7	1	0
December, 1950	7 10	9	8 19
patients	8.4	7.5	15.9
deceased patients in days	11	10.9	•••

Total number of patients who received out-door treatment 70

Working Inmates.

Working Inmates.	
In institution on 31st December, 1949	2
Admitted during 1950	1
Total	3
Discharged during 1950	3
Districting to the state of the	
Remaining in institution on 31st December, 1950 Daily average number	Nil
General average number (daily) including	
workers	16.
	-
Operations Performed.	
	^ =
Head, Face, Sinns, E.N.T.	25
Abnormal	66
Orthopaedic	6 35
Gyno, and Curettes, etc	15
Dental	21
General	42
Minor	
Total	210
X-ray Department.	
Films used (including 30 dental)	389
Standard Establishment.	
Medical and Clerical.	
Medical Officer (Part-time)	1
Clerk (Male)	1
	2
	-
Nursing.	1
Matron	1
Head Nurse	6
Trained Nurses	3
Assistants in Nursing	-
	11
Attendants.	
Indoor Attendants	2
Outdoor Attendants	2
	4
Domestic Staff.	
Wardsmaids and Housmaids	5
Housemaid Part-time Cook	1
Cook	1
	2

Staff Shortages.

Total Authorised Staff

9

26

Laundresses

Staff shortage as	at 31st	December, 1950.	
Nursing Staff .		2	

The staff position throughout the year fluctuated and at times the shortage was acute. However, the daily average of resident patients was higher than the previous twelve months and the number of operations performed was practically the

[§] Includes 6 attendants in lieu of Nurses.

LEPER LAZARET.

Report on Leprosy in New South Wales for the Year Ended 31st December, 1950.

On 1st January, 1950, twenty (20) persons remained under detention at the Lazaret.

No deaths occurred during 1950.

The total number of persons admitted since 1883, when patients were first received (though the notification of leprosy was first made compulsory and the detention of lepers provided for by law only towards the end of 1900), is 229. Distributed under nationalities, the account stands as follows at 31st December, 1950:—

	Ad- mitted.	Re- admitted	Dis- charged.	Re- patriated	Died.	Remaining in at 31st Dec., 1950.
Whites, of European						
descent—						
New South Wales	• • •				• • •	5
Victoria	•••		•••			
Queensland	•••					1
Northern Territory	• • •					
Western Australia	•••	•••				1
New Zealand	***					
Fiji	• • •				•••	1
England	•••	•••				
Ireland	•••	•••		• • • • •		• • •
Scotland		•••	•••	•••	• • •	•••
Germany	•••					
Belgium	•••	• • • • • • • • • • • • • • • • • • • •	•••	•••		
U.S. America	•••	• • • • • • • • • • • • • • • • • • • •		•••	•••	
Greece	•••		•••	•••	•••	
Malta	• • •	•••	• • •	•••	• • •	3
Sweden	•••	•••	•••		•••	
France	•••	•••	•••		• • •	
Mauritius	• • •	• • • •	•••	• • • •	• • •	
Italy		• • • • • • • • • • • • • • • • • • • •	•••	•••	• • •	
India	1	•••	•••		•••	
Coloured nationts						
Coloured patients— New South Wales		}		1		_
West Indies	•••		•••	***	• • •	5
	•••	•••	•••	• • • •	• • • •	• • •
India	•••	•••	•••	• • • •	• • •	:
China Straits Settlements	•••	•••	• • •	•••	• • •	2
~	•••	•••	•••	• • •	•••	1
New Caledonia	•••	• • • • • • • • • • • • • • • • • • • •	•••	•••	•••	•••
Pacific Islands	•••	•••	•••	•••	•••	
	•••	• • • • • • • • • • • • • • • • • • • •	•••	• • •	•••	•••
EgyptZanzibar			•••	•••	•••	•••
	•••	•••	•••	•••	•••	•••
Syria Somaliland–Africa			•••		•••	
bomamama-Amea			•••	1	•••	1

Thus the number remaining in the lazaret on 31st December, 1950, was twenty persons; thirteen males and seven females.

Appendix A shows particulars of each case under detention since the year 1912,*

Every opportunity has been offered to members of the medical profession to visit the lazaret for the purpose of seeing such patients as were formerly under their care, or for study of the disease.

The following statements show the expenditure for the year, and the sources from which it has been defrayed:—

Statement showing the working expenses of the Lazarets (for men and for women) at Little Bay for the year 1950,

	£	s.	d.
Salaries	. 6,737	5	4
Provisions	. 3,194	5	1
Tobacco and comforts	. 398	13	1
Clothing	. 640	15	6
Fuel and light	. 502	1	6
Drugs, dressings, etc	. 287	16	8
Miscellaneous	. 1,411	16	0
	£13,172	13	2
	_		

Deduct amounts received in respect of maintenance, £3,296 6s. 9d., nett cost, £9,876 6s. 5d.

Average number of patients resident, 20.9, being equal to an average of £472 11s. per inmate per annum in 1950.

In Lazaret on 1st January, 13 males, 7 females; total, 20. Admitted during the year, 1.

Died during the year, nil.

Discharged, nil.

Repatriated, 1.

Remaining in Lazaret on 31st December, males, 13; females, 7; total, 20.

STATISTICAL SUMMARY.

Table I.—Summary of Expenditure—Randwick Auxiliary Hospital, Strickland Convalescent Hospital, Waterfall Sanatorium, State Hospitals and Homes Lidcombe, Liverpool and Newington, and David Berry Hospital, for the twelve months ended 30th June, 1950.

				1				
Head of Expenditure.	Randwick.	Strickland.	Waterfall.	Lidcombe.	Liverpool.	Newington.	David Berry.	Total.
Salaries and Payments in the nature of	£ s. d.	£ s. d.	£ s. d.	£ s. d.	£ s. d.	£ s. d.	£ s. d.	£ s. d.
Salaries Provisions.	$\begin{array}{cccccccccccccccccccccccccccccccccccc$	6,656 16 0 5,842 11 10		119,819 9 1 55,980 9 3	52,999 8 7 25,504 8 6	$\begin{array}{ c c c c c c c c c c c c c c c c c c c$		324,826 17 1 157,466 18
Orugs and Surgical Appliances, Dressings, etc. Fuel, Electricity and Water. Domestic Utilities, including Laundry	$\begin{array}{cccccccccccccccccccccccccccccccccccc$						$\begin{array}{c ccccccccccccccccccccccccccccccccccc$	$\begin{array}{cccc} 26,961 & 0 \\ 26,501 & 8 & 1 \end{array}$
Expenses, Household Linen, Clothing, Furniture, etc	4,804 16 11 3,742 7 4	$780 \ 11 \ 2$ $737 \ 3 \ 8$		1 20,101 1 1	0,000 21 10			39,643 15 1 4 6,30 0 2
and Plant	8,598 9 10	4,128 8 10	10,465 15 7	12,468 16 6	6,612 10 0	20,176 17 0	1,187 16 6	63,638 14
Gross Maintenance Expenditure collections for Sales, Maintenance, and Payments by Commonwealth Govern-	95,263 1 6	18,998 11 4	103,131 4 3	235,534 3 5	111,855 2 7	105,428 8 7	15,137 6 8	685,347 18 4
ment	23,880 8 6	931 10 1	38,698 2 0	117,369 19 10	46,682 0 7	38,510 2 8	2,364 19 4	268,437 3 0
Nett Maintenance Cost to State	71,382 13 0	18,067 1 3	64,433 2 3	18,164 3 7	65,173 2 0	66,918 5 11	12,772 7 4	416,910 15
Average daily population	168 £ s. d. 567 0 10	90 £ s. d. 211 1 11	387 £ s. d. 266 9 9	1,175 £ s. d. 200 9 2	676 £ s. d. 165 9 4	434 £ s. d. 242 18 6	17 £ s. d. 890 8 8	2,947 £ s. d. 232 11 2
maintenance eost to State	424 17 11	200 14 11	166 9 11	100 11 3	96 8 3	154 3 10	751 6 4	141 9 5
maintenance expenditure	10 17 6	4 1 0	5 2 2	3 16 11	3 3 6	4 13 2	17 1 7	4 9 2
maintenance eost to State	8 3 0	3 16 10	3 3 10	1 18 7	1 17 0	2 19 1	14 8 2	2 14 3
maintenance	6,585 15 2	5,001 5 11	20,238 18 0	22,148 17 7	4,241 16 8	8,030 0 8		66,246 14 0

SECTION IV.

PATHOLOGICAL LABORATORIES.

REPORT OF THE DIRECTOR OF PATHOLOGICAL LABORATORIES FOR THE YEAR 1950.

Director.—Ernest Leslie Morgan, M.B., Ch.M. (Syd.).

Assistant Director.—Keith H. Grieve, M.C., M.B. (Syd.).

Medical Officers.—Stanley W. M. King, L.R.C.P. (Lond.), M.R.C.S. (Eng.); Farquhar W. Fraser, M.B., Ch.M. (Syd.); Stephen G. Mallarky, M.B., B.S., D.T.M.; John D. Murphy, M.B., B.S. (transferred to Lidcombe State Hospital on 13th March, 1950); Pamela Bulteau, M.B., B.S. (commenced duty 23rd October, 1950).

Senior Microbiologist.-H. V. Justelius.

Microbiologists.—L. H. Snell, A.S.T.C., A.A.C.I.; W. C. Thompson; Annette Playoust, B.Se. (Syd.); R. Truman, A.S.T.C. (transferred to Forestry Commission on 3rd January, 1950); E. Jacob, B.Se. (Agr.); B. O'Connor, A.S.T.C. (transferred to Randwick Auxiliary Hospital Laboratory on 3rd January, 1951).

Laboratory Assistants.—A. J. Williamson, J. Flynn, D. Croft, L. F. Horton, K. Fraser, D. Brown, J. B. Jones, P. Helisma (resigned 13th October, 1950), R. F. Taylor, W. A. Bronkhurst, B. Sinkovic, N. Martin (commenced 28th August, 1950), W. Camden (commenced 19th June, 1950, resigned 30th June, 1950).

Clerical.—N. E. Seahill, E. J. Starr (resigned 3rd November, 1950), J. Barrett (part-time until 15th December, 1950, being transferred to this Laboratory for full-time duty on that date).

Attendants.—J. W. Foster, J. Fletcher, L. Hinds, A. V. Lynch, H. J. Moseley.

Sir,

I have the honour to present the following report on the work carried out in the Microbiological Laboratory during 1950.

The amount of revenue collected from charges for examinations, sale of media, etc., was £540 17s. 6d.

The number of laboratory examinations earried out during the year, compared with those of 1949, shows little variation, the respective figures being:

	1949	1950
General laboratory examinations	70,780	70,318
Examinations of rats for plague	1,306	1,811
	72,086	72,129

Diphtheria.

Both the number of swabbings and the number of tests for toxicity declined during the year, the former from 3,146 in 1949 to 1,924 in 1950, and the latter from 228 to 85. The reason for this latter decline was largely the great shortage of guinea-pigs which was present throughout the year.

Typhoid and Salmonella Infections.

There has been a slight increase in the total number of examinations in connection with salmonella infections, mainly due to the examination of urine and faeces in the search for carriers of S. typhi.

During the year two cases of infection with S. Paratyphi B. were encountered.

An interesting example of the detection of a typhoid earrier occurred in a small outbreak of typhoid fever which involved a family in the New Hebrides. The Department was asked whether they could help in the locating of the source of infection and agreed to do so. Cultures of facces and urine from suspected persons were made in tetrathionate broth and forwarded by air to this Laboratory. S. typhi was recovered from one of the specimens of facces.

Malaria.

During 1950 the number of slides submitted for examination for malarial parasites was thirty-two, compared with forty-one in 1949 and sixty-two in 1948. In five eases malarial parasites were found and in each instance the parasite was P. Vivax.

Gonorrhoea and Syphilis.

There has been a further decline in the number of smears submitted for examination for gonoeoeci. Examinations in 1950 numbered 4,135, as against 5,166 in 1949. Complement deviation tests also decreased from 3,639 to 2,592. Ten years ago the number of slides examined for gonoeoeci was well over 20,000 yearly. Wasserman reactions and Kahn tests numbered 22,320 and 21,558, eompared with 22,964 and 20,467 respectively, in 1949. These numbers differ little from those of ten years ago. In order to assist the Division of Social Hygiene, the Serology Section of this laboratory undertook the quantitative Wasserman reaction, and during the year 2,341 examinations were earried out.

Milk.

The number of samples of milk submitted by the Milk Board for the determination of bacterial content was 2,983, compared with 1,523 in 1949 when, as I have previously pointed out, various interruptions to the work occurred. The number of samples submitted for examination for tubercle bacilli and B. abortus was 407 compared with 319 the previous year. In two instances the guinea-pigs developed tuberculosis and 91 pigs showed evidence of infection with B. abortus. Shortage of guinea-pigs to some extent hampered this work.

Accommodation.

Despite the fact that for years I have called attention to the shortage of accommodation, no action to remedy the situation has yet been undertaken.

The overerowded conditions of the laboratory greatly hinder the present amount of work which is carried out and render impossible any extension of the laboratory's activities.

Table showing the Routine Examinations made for the various Branches of the State Department of Public Health, other Government Departments, Subsidised Hospitals, etc.

	Number of Examinations Comparative Statement.		
	1949.	1950.	
Department of Public Health—			
Head Office Submissions	22,650	24,231	
David Berry HospitalLideombe State Hospital and Home	26	72	
Liverpool State Hospital and Home	$\frac{1,304}{340}$	$1,270 \\ 432$	
Newington State Hospital and Home	25	22	
Waterfall Sanatorium	$\frac{20}{52}$	267	
Medical Officer of Health, Metropolitan District	$\frac{2}{2}$	19	
Medical Officer of Health, Hunter River District		10	
Randwick Auxiliary Hospital (T.B.)	293	342	
Commonwealth Government	2,584	2,279	
State Departments—			
Agriculture Department Education Department	 82	2	
Child Welfare Department	$\begin{bmatrix} 82 \\ 2 \end{bmatrix}$	ئے 84	
Government Stores Department	17	10	
Milk Board	1,842	3,397	
Poliee Department	109	113	
Prisons Department	559	423	
Railway Department	12	• • •	
Miseellaneous Government Departments	26	5	
Private Practitioners	12,563	11,067	
Public Hospitals and Institutions (other than	74.007	10.040	
State Hospitals)	14,801	12,840	
Mental Hospitals Municipal and Shire Councils	$\begin{array}{c} 8,\!556 \\ 252 \end{array}$	8,282 193	
Rachel Forster Hospital	$\frac{232}{4,683}$	$\frac{193}{4,958}$	
Twenter Torsier Hospital	1,000	1,000	
Total Examinations (General)	70,780	70,318	
Rats for Plague	1,306	1,811	
	72,086	72,129	

In the following Statement the Routine Work is divided into sections to disclose the purposes for which the various examinations were made.

	Number of Examinations Comparative Statement.	
A. Microbiological Examinations.	1949.	1950.
1. Of materials from diseased persons and animals—		
Actinomyeosis	$\frac{9}{35}$	$\frac{3}{30}$
Diphtheria Swabbings	3,146	1,924
Diphtheria Toxicity	228	85
Dysentery	29	80
Gonorrhoea (smears and urine)	5,166	4,135
Gonorrhoea Complement Deviation Test	3,639	2,592
Haemolytic Streptococci	361	156
Hydatids (sputa, smears, etc.)	4	3
Hydatid (Complement Deviation Test)	$\frac{42}{189}$	$\begin{array}{c} 55 \\ 162 \end{array}$
Leprosy (Human)	41	$\frac{102}{32}$
Meningitis	10	8
Syphilis (Wassermann Reactions)	22,964	22,320
Syphilis (Quantitative Wassermann—only	22,001	,
undertaken since January, 1950)		2,341
Syphilis (Kahn)	20,467	21,558
Syphilis (Spirochaetes)	736	462
Tetanus	5	7
Tinea (Monilia, etc.)	27	15
Tubereulosis	1,163	1,110
Typhoid (Widal Reaction)	$\frac{64}{50}$	51
Typhoid (Urine, Facees)	58 5	131 1
Typhoid (Miscellaneous Water, Milk, etc.)	46	76
Paratyphoid A and B	14	16
Typhus (Weil Felix)	455	501
Choladellica in growing Train pady over	100	

	Number of Examinations Comparative Statement.	
	1949.	1950.
Vincent's Angina Rat Leprosy	70	39
Glandular Fever (Paul and Bunnell)	24	14
Human Beings Shaving Brushes, etc. Wool		
3. Examinations of Materials, etc	37	9
Chemical Closet Contents Disinfectants (Rideal Walker) Feathers	$\frac{2}{21}$	
Soil Waters	$\frac{6}{228}$	17 164
Waters from Swimming Baths	33	37
ination, Bread, Ice-cream, etc.— Milk samples submitted by the Milk Board for examination for Tubercle Bacilli and		
Brueella Abortus	319	407
submitted by the Milk Board	1,523 201	2,983 151
B. Pathological Examinations. 1. Of Animals—		
Mammals Fish	•••	• • •
2. Of Body Fluids— Blood for full and differential count		931
Blood for sedimentation rate	10 1 4	14 3 8
Chemical Examinations— Blood for Sugar	183	194
Blood for Sugar Toleranee	173 125	183 157
Blood for Creatinine	$\begin{array}{c} 4\\197\end{array}$	30 145
Blood for Cholesterol	81	40 243
Urines for Sugar Urines for Urea Test Meal Specimens	48 98	85 68
Calculus Miscellaneous Chemical Examinations	$\begin{array}{c c} 604 \\ 8 \\ 205 \end{array}$	583
Cell Counts	$ \begin{array}{c c} 205 \\ 392 \\ 759 \end{array} $	500 357
Protein, Globulin and Total Protein Takata Ara	$456 \\ 260$	$538 \\ 362 \\ 183$
Chlorides Miseellancous Cerebro Spinal Fluids	52 22	76 24
Faeces	$ \begin{array}{c} 299 \\ 472 \end{array} $	330 420
3. Of Tissues for Histologieal Examination	2,749	2,03
C. Examination of Parasites. Eeto-parasites (Fleas, Tieks, etc.)	6	1
Endo-parasites (Round and Flat Worms, etc.) Protozoa	11	
D. Medico-Legal Examinations.	•••	•••
Examination of Exhibits for Blood, Seminal Stains, etc.	122	124
E. Examination of Specimens for Preparation of Vaccines and Miscellaneous Examinations.		
Preparation of Autogenous Vaccines from sputa, urine, aene pustules, boils, wounds and other septic conditions	304	273
Triehomonas		9
Utensil Swabs Weil's Discase Miscellaneous (General)	$\begin{array}{c} 353 \\ \dots \\ 25 \end{array}$	11
Spermatozoa	2	3
	70,780	70,318

The following table indicates the Rats and Mice destroyed and examined at Sydney and Newcastle during the year ending 31st December, 1950.

	1950—Sydney.				1950—Newcastle.				
	R.R. Rattus.	Rattus Nor- vegicus.	M. Mus- culus.	Total.	R.R. Rattus.	Rattus Nor- vegicus.	M. Mus- culus.	Total	
January	72	95	2	169		•••		•••	
February		127		192		•••		• • •	
March		102		171					
April		59		82					
May	53	166	3	222					
June	74	129	1	204					
July	53	98	$\frac{1}{2}$	153					
August	76	137	2	215					
September	20	93		113	1	2		3	
October	22	73	4	99	1	1		3	
November	26	61		87	2	1		3	
December	24	72	•••	96		•••			
	577	1,212	14	1,803	4	4		8	

E. L. MORGAN, Director of Pathological Laboratories.



